#1

PAGE 1

Q1: **First Name (optional)**	Jonathan
Q2: **Last Name (optional)**	Fitch
Q3: **Company or Organization - if applicable (optional)**	West Boylston Municipal Lighting Plant
Q8: **Which emission source(s) does your comment address**	Electricity Generation & Distribution

Q9: **Please type your comment below.**

The Renewable Portfolio Standard (RPS), Regional Greenhouse Gas Initiative (RGGI), Green Communities Act, fuel switching, and the retirement of coal/oil generation from the regions energy portfolio, are significantly reducing the Commonwealth's GHG emissions in the energy generation and distribution sector.

The energy generation and distribution sector reduced GHG emissions approximately 49% by the end of 2012, compared to 1990 levels (http://www.mass.gov/eea/docs/dep/air/climate/maghginv.xls). All of the Commonwealth's coal based energy generation will close by the end of 2017. The energy generation and distribution sector's GHG reduction to date, exceeds the Commonwealth's goals in the Global Warming Solutions Act (GWSA) and Clean Energy and Climate Plan (CECP).

Please consider the long term requirements of MA DOER's RPS legislation before additional regulations are considered and proposed by DEP. RPS requires Investor Owned Utilities (IOU's) to procure approximately 63% of their energy from clean, renewable energy sources by 2050. The Commonwealth should let these existing RPS regulations achieve the majority of their designed GHG reductions in the energy generation and distribution sector before additional regulations are considered.

#2

PAGE 1

Q1: First Name (optional)	*Respondent skipped this question*

Q2: Last Name (optional)	*Respondent skipped this question*
Q3: Company or Organization - if applicable (optional)	*Respondent skipped this question*
Q8: Which emission source(s) does your comment address	Building Fuels & Energy Efficiency

Q9: Please type your comment below.

Given that many stakeholders are already reporting in BOTH the source registration and GHG report, it would be a huge burden to have to report into another system so DEP can develop metrics to satisfy this latest regulatory scheme. As the holder of a Title V permit with a history of reporting, we can show that we are continually reducing our fossil fuel emissions. As I submit the SR and GHG on April 15 every year, I am frustrated that the two reports use the same fuel use data but are calculating different emissions. The GHG report is the more robust in terms of including other emissions. Maybe the time has come to retire the source registration.

#3

PAGE 1

Q1: First Name (optional)	Diana
Q2: Last Name (optional)	Arezzo
Q3: Company or Organization - if applicable (optional)	*Respondent skipped this question*
Q8: Which emission source(s) does your comment address	Other (please specify) All sources combined

Q9: Please type your comment below.

I very firmly support the strongest possible regulations and all possible measures to meet the requirements of section 3(d) for reduction of emissions. Climate change is already causing major disruptions and harm, and it will surely lead to climate catastrophe and environmental collapse unless we see dramatic policy responses on all fronts. This is the most dangerous challenge that the human race has ever faces. I commend Governor Baker for taking these first steps. We need continued and accelerated commitment to tackling the the climate challenge.

#4

PAGE 1

Q1: First Name (optional)	Betty
Q2: Last Name (optional)	Bingham
Q3: Company or Organization - if applicable (optional)	*Respondent skipped this question*
Q8: Which emission source(s) does your comment address	Other (please specify) nuclear power

Q9: Please type your comment below.

Under no conditions should nuclear power be permitted as an energy source in Massachusetts.

Decommission the dangerous Pilgrim Plant by 2019 or SOONER to protect citizens from a potential cataclysm.

Close Pilgrim Nuclear now!

#5

PAGE 1

Q1: First Name (optional)	Alexandra
Q2: Last Name (optional)	Grabbe
Q3: Company or Organization - if applicable (optional)	*Respondent skipped this question*
Q8: Which emission source(s) does your comment address	Other (please specify) Pilgrim nuclear plant as clean energy

Q9: Please type your comment below.

Governor Baker is now recommending that nuclear be part of the mix for clean energy sources that would reduce the emissions threshold in Massachusetts. Absolutely unacceptable. Such a plan would slow the closing of the Pilgrim nuclear plant. This plant is among the three worst performers in the USA. It is 44 years old. It has been plagued with problems. I am worried that there will be a major accident and radiation will be released, with the potential to give cancer to everyone within 100 miles and that that Cape Cod would suffer such damage that real estate would lose value. No, no, no. I say close the damn thing and do it now! What is clean when you consider the risks involved? Nothing.

#6

PAGE 1

Q1: **First Name (optional)**	Bonnie
Q2: **Last Name (optional)**	Shepard
Q3: **Company or Organization - if applicable (optional)**	Down Cape Downwinders
Q8: **Which emission source(s) does your comment address**	Other (please specify) Nuclear energy plants - Pilgrim

Q9: **Please type your comment below.**

MY COMMENTS ARE IN CAPS.

PLEASE DO NOT INCLUDE NUCLEAR POWER IN THE "CLEAN ENERGY" CATEGORY! IT IS ANYTHING BUT! THE PILGRIM NUCLEAR PLANT'S LACK OF SAFETY IS A THREAT TO US ALL, AND THEY SHOULD NOT BE ELIGIBLE FOR CLEAN ENERGY SUBSIDIES. "Clean Energy Standards: Baker admin page 94 "the CES could also create a framework for other technologies that could meet the emissions threshold, including next-generation nuclear power or carbon capture and sequestration, if such technologies were to become viable options over the longer term."

ENTERGY SHOULD NOT BE ALLOWED TO REFUEL IN JANUARY. THEY HAVE NOT ADDRESSED SAFETY ISSUES, AND JUST RELEASED A HYDROGEN BUBBLE! Page 95 "Experience in Other States: The CES would build on the experience of Massachusetts and other states with similar programs that address renewable and alternative energy."

ENTERGY HAS ANNOUNCED IT IS CLOSING THE PILGRIM PLANT, BUT IF THEY GET BOUGHT (AS HAPPENED WITH FITZPATRICK PLANT IN UPSTATE NEW YORK) THAT IS OFF THE TABLE. .

#7

PAGE 1

Q1: **First Name (optional)**	May Ruth
Q2: **Last Name (optional)**	Seidel

Q3: Company or Organization - if applicable (optional)	*Respondent skipped this question*
Q8: Which emission source(s) does your comment address	Electricity Generation & Distribution

Q9: Please type your comment below.

Governor Baker must not include nuclear energy in the Massachusetts' "energy mix". Pilgrim Nuclear Plant is not safe - our lives are at risk! Please understand Pilgrim must close NOW - before it's too late!

Thank you.

#8

PAGE 1

Q1: First Name (optional)	James
Q2: Last Name (optional)	Garb
Q3: Company or Organization - if applicable (optional)	*Respondent skipped this question*
Q8: Which emission source(s) does your comment address	Electricity Generation & Distribution , Other (please specify) Nuclear Power

Q9: Please type your comment below.

As a physician specializing in occupational and environmental medicine, I was disappointed to see nuclear energy listed as a potential technology to meet the emissions threshold on page 94 of the Clean Energy and Climate Plan for 2020 (CES). I believe this represents seriously flawed thinking, and probably appears in this document as a result of pressure from the powerful nuclear industry.

In the nearly six decades since the opening of the first American commercial nuclear power plant in 1958, this country has not managed to implement a satisfactory long term nuclear waste storage program, and there is no realistic prospect for a nuclear waste repository any time soon. This has essentially created approximately 100 de facto nuclear waste dumps scattered around the United States. In this age of international terrorism, such a status quo is totally unacceptable, and the thought of increasing the generation of nuclear waste still further should not even be on the table. The hazards associated with the storage of spent nuclear fuel rods is not well understood by most people. Coupled with the dire consequences of a serious nuclear accident (as at Fukushima) and the increasing likelihood of such an accident due to mechanical failure as these plants age, this spent nuclear fuel storage problem should render any discussion of constructing new nuclear power plants moot. The Fukushima disaster was triggered by a tsunami. But a similar nuclear disaster could occur due to mechanical failure, human error, a natural disaster or an act of terrorism.

Massachusetts has one nuclear power plant, Pilgrim, which should be immediately decommissioned based on its age and frankly abysmal track record of mechanical failures and safety violations. Pilgrim can hardly be considered emissions free. Remember that the goal of the CES is to slow the rate of global warming. In this light, Pilgrim is a huge violator due to the nearly 500 million gallons of heated sea water it dumps back into Cape Cod bay every day. In addition to warming the ocean, this discharge damages the seabed and the organisms that live there, while also killing countless other sea organisms when they are entrained in Pilgrim's water intake. Additionally, the mining, refinement and transport of the nuclear fuel used by Pilgrim and other nuclear reactors does generate considerable greenhouse gas.

There is enough excess power in the New England power grid so that the power we get from Pilgrim is not even necessary, even on the hottest day of the summer when everyone is running their air conditioning. When Pilgrim goes down, which it does all too frequently, no one's lights go out. In other words, we would have ample time to take Pilgrim offline and continue to aggressively develop solar and wind energy sources, which are truly green and sustainable without the potential for devastating hazards. We should also be looking into mechanisms to harness the power of the changing tides as another emissions free way to generate electricity. This powerful force of nature is available for a good part of every day, independent of the winds and sunshine.

In summary, while the idea of nuclear power plants may have made some sense in the 1950's, we have never resolved the issue of nuclear waste storage, and we have seen several examples of the serious hazards that such plants can become. The more recent technological innovations since the 1950's, including wind and solar, should relegate nuclear power plants to the pages of history.

#9

PAGE 1

Q1: First Name (optional)	Mark
Q2: Last Name (optional)	*Respondent skipped this question*

Q3: Company or Organization - if applicable (optional)	*Respondent skipped this question*
Q8: Which emission source(s) does your comment address	Building Fuels & Energy Efficiency , Transportation, Land Use & Smart Growth

Q9: Please type your comment below.

The state should consider it's own gas guzzler tax.

"The federal Gas Guzzler Tax is assessed on new cars that do not meet required fuel economy levels. These taxes apply only to passenger cars. Trucks, minivans, and sport utility vehicles (SUVs) are not covered because these vehicle types were not widely available in 1978 and were rarely used for non-commercial purposes."

A Massachusetts tax should include the trucks,minivans and SUVs that the federal law does not apply to!

#10

PAGE 1

Q1: First Name (optional)	Tracy
Q2: Last Name (optional)	Manzella
Q3: Company or Organization - if applicable (optional)	CARCS
Q8: Which emission source(s) does your comment address	Natural Gas Distribution System Leaks

Q9: Please type your comment below.

It is outrageous that Spectra and our Governor Baker could suggest that we in Massachusetts are in danger of fuell shortages when they blindly allow for leaky gas pipeline emissions to continue to pollute our atmosphere and pose health and safety risks to our citizenry. The GHG emissions in our state fro leaky gas infrastructure is documented and needs to be stopped and costs us in our energy bills! Don't they dare tell me how safe their pipeline will be once they ramp it up with 35% more volumes of gas. Don't you dare tell me that we are in danger of brown outs when our 3 LNG tanks are virtually idle because we are choosing not to import our gas. FIX THE LEAKS. STOP SPECTRAS ACCESS NORTHEAST PIPELINE EXPANSION. Let's move in a positive direction which is extricating ourselves from our fossil fuel over dependency.

#11

PAGE 1

Q1: First Name (optional)	*Respondent skipped this question*
Q2: Last Name (optional)	*Respondent skipped this question*
Q3: Company or Organization - if applicable (optional)	*Respondent skipped this question*
Q8: Which emission source(s) does your comment address	Transportation, Land Use & Smart Growth

Q9: Please type your comment below.

Please consider the benefits of directing State Police, even better all police, to turn off their cruisers when they expect to stay in a particular location for more than 3 minutes. Massachusetts has an anti-idling law because it recognizes the negative impacts of vehicle emissions. There are only positive outcomes associated with this simple enforcement of this regulation. Pollution, greenhouse gas emissions will be prevented and savings will be achieved from reduced gasoline consumption and less wear on vehicle engines. The emergency responder will not be hindered in any way, in fact his/her health will be protected with less exposure to vehicle exhaust.

#12

PAGE 1

Q1: First Name (optional)	*Respondent skipped this question*
Q2: Last Name (optional)	*Respondent skipped this question*
Q3: Company or Organization - if applicable (optional)	*Respondent skipped this question*

Q8: Which emission source(s) does your comment address	Natural Gas Distribution System Leaks , Electricity Generation & Distribution

Q9: Please type your comment below.

We should make every effort to support and subsidize solar and wind power electricity generation and storage both at the private and commercial levels.. We should not invest in nuclear power generation, a costly and environmentally lethal form of power generation which generates hazardous waste which cannot be safely transported or disposed of. Investment in long-term storage devices fro renewably generated electricity should be part of this plan. Further investment in natural gas delivery sould not be made, rather investments in renewable clean energy sources should be called for. Let's not invest any more in an outdated system of fossil fuel delivery which contributes further to global warming.

#13

PAGE 1

Q1: First Name (optional)	Ken
Q2: Last Name (optional)	Egnaczak
Q3: Company or Organization - if applicable (optional)	Resident of Massachusetts
Q8: Which emission source(s) does your comment address	Electricity Generation & Distribution

Q9: Please type your comment below.

Our non-commercially viable Micro hydro (100 kW or less) sites are largely abandoned due to regulatory costs. Why is there a $500 Notice of Intent filing fee for " Electric Generating Facility Activities" ? Why can't existing Micro hydro infrastructure be exempt from Wetlands resource area designation like road culverts are ? Why can't the GHG emissions displaced by Micro hydro generation count as a benefit when restoring a Micro hydro site ? Why does the Department of Environmental Restoration have money to destroy our Micro hydro assets but there is no money to restore these renewable energy sites ?

Our hydro assets are a historically proven resource. A kW of Micro hydro can produce at least 6 times more energy than a kW of solar. Why not develop policies that encourage Micro hydro development instead of the costly, obstructionist policies that exist today.

#14

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Q1: **First Name (optional)**	Ken
Q2: **Last Name (optional)**	Egnaczak
Q3: **Company or Organization - if applicable (optional)**	Massachusetts citizen
Q8: **Which emission source(s) does your comment address**	Transportation, Land Use & Smart Growth

Q9: **Please type your comment below.**

It is widely known that wetlands are a significant source of GHG methane. Just Google "wetlands+methane" and read about it. Being a GHG source, why aren't wetlands regulated and managed to minimize their GHG emissions ? It seems like we have an over-abundance of wetland designated land in Massachusetts, from ponds and swamps to old cellar holes and roadside ditches. These anaerobic soil area's GHG methane emission rates will only increase with a warming climate.

Also consider encouraging hydro power development at wetlands. Although the hydro cannot stop the wetland methane emissions, the electricity produced can displace electricity generated by a fossil fuel powered generator. Hydro in this manner should be considered remediation for wetland emissions.

#15

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Q1: **First Name (optional)**	Ken
Q2: **Last Name (optional)**	Egnaczak
Q3: **Company or Organization - if applicable (optional)**	Massachusetts citizen
Q8: **Which emission source(s) does your comment address**	Transportation, Land Use & Smart Growth

Q9: **Please type your comment below.**

A typical septic system acts like an anaerobic digester and therefore produces GHG methane. Aerobic composting type systems that produce carbon dioxide instead of more potent methane should be encouraged. From what I am told by officials, if I install an aerobic system I would have to still have to install a conventional anaerobic system.

Also, sewage treatment plants and capped landfills should be required to have methane capture at these facilities.

#16

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Q1: **First Name (optional)**	David
Q2: **Last Name (optional)**	Zeek
Q3: **Company or Organization - if applicable (optional)**	Sierra Club, Massachusetts Chapter
Q8: **Which emission source(s) does your comment address**	Natural Gas Distribution System Leaks

Q9: **Please type your comment below.**

Comments for Department of Environmental Protection hearing on Executive Order 569

The Massachusetts Chapter of the Sierra Club (MASC) hereby submits comments on the Department of Environmental Protection's consideration of Governor Baker's Executive Order 569, Establishing an Integrated Climate Change Strategy for the Commonwealth. The Sierra Club is the oldest and largest non-profit, non-partisan environmental organization in the country. With over a forty-year history, the Massachusetts Chapter of the Sierra Club represents over 60,000 members and supporters throughout the state and nearly one million nationwide. We fight for clean energy, clean air, clean water, the preservation of the Commonwealth's natural spaces, and environmentally and economically healthy, vibrant and sustainable communities.

These comments focus on limiting emissions from leaks in the natural gas distribution system as directed in Section 2 b.(i).

This issue was also a focus of Bill 4568, An Act to promote energy diversity, which was adopted in July, 2016. Section 13, of that bill says that the Department of Public Utilities, in consultation with the Department of Environmental Protection, shall establish criteria to identify the environmental impact of Grade 3 gas leaks, pursuant to section 144 of chapter 164 of the General Laws, and to establish a plan to repair leaks that "have a significant environmental impact" and to "promulgate rules regarding the timeline and acceptable methods for remediation and repair" of such Grade 3 leaks.

At the same time, the Department of Public Utilities is already considering this issue under DPU Docket 16-31, An order instituting rule making related to gas leaks, in response to 2014 legislation.
The Massachusetts Chapter of the Sierra Club believes that the right goal for natural gas emissions is zero emissions, and the best approach to achieving zero emissions is the same for DEP's regulations, for the energy bill, and for DPU's regulations. The Sierra Club recommends that priority be given to locating, identifying, and fixing high-volume gas leaks.

A Boston University study, [Margaret Hendrick, Robert Ackley, et al "Fugitive methane emissions from leak-prone natural gas distribution infrastructure in urban environments"] published this year, analyzed the gas leaks in Boston and found that just 7% of the leaks accounted for 50% of leaked gas. These high-volume leaks are called super-emitters.

Since natural gas emissions are a health hazard for trees and people, and since methane emissions into the air retain 84x the heat that carbon dioxide does over the first 20 years, and since all leaked gas is a waste of a resource and a cost to natural gas customers, we must make every effort to eliminate the leaks.

Specifically, we recommend that, on an annual basis, the size of each gas leak be assessed and that the 10% of the leaks that are leaking the most gas be labeled "super-emitters" and be scheduled for repair or pipe replacement within

12 months.

DPU's Docket 16-31 [Section 114.04] already proposes that "the size of the leak" should be one of the parameters for leak classification. In the spirit of the Boston University study, we would elaborate "size of the leak" to mean volume of escaping natural gas. And the measure of size is the best measure available that reflects the volume of leaked gas.

According to gas leaks data reported to DPU by the gas companies for 2015, 13,000 leaks were repaired in 2015, and 95% of those were Grade 1 or Grade 2, which are safety hazard leaks. 16,000 leaks remained at the end of 2015, and 96% of those were the Grade 3 leaks, many of which have been leaking for years, if not decades. If the worst 10% of the remaining leaks, i.e., the Grade 3 leaks, were also repaired, that would be 1,600 more repairs. So this additional leak repair load would be about a 12% increase –significant but not overwhelming.

Identification and repair, annually, of the 10% worst leaks is a regulation that DEP could adopt with assurance that this will significantly reduce natural gas emissions. Adopting this recommendation to identify and repair super-emitters is the right answer.

The Sierra Club believes that addressing the worst gas leaks on a continuing basis will drastically reduce the damage and cost caused by leaking natural gas and will help the Commonwealth meet its goals for greenhouse gas emissions under the Global Warming Solutions Act.

Respectfully submitted,
David Zeek
Massachusetts Chapter of the Sierra Club
10 Milk Street, Suite 417 Boston MA 02108-4600
(617) 423-5775
sierraclub.org/massachusetts

#17

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Q1: **First Name (optional)**	Janice
Q2: **Last Name (optional)**	Kurkoski
Q3: **Company or Organization - if applicable (optional)**	Warwick Buildings & Energy Committee
Q8: **Which emission source(s) does your comment address**	Building Fuels & Energy Efficiency , Electricity Generation & Distribution

Q9: Please type your comment below.

It is our Committee's experience that conservation is the most practical, effective, and least costly method to insure against rising energy costs, pre-mature building failure, resource depletion, and climate change. Using low-cost weatherization methods, local labor, and common sense, we have significantly reduced energy use in all town buildings, saving hundreds of tax-payer dollars.
Conservation is cumulative in its energy savings. Each year's conservation activities add to conservation done in prior years so there is a cumulative savings, sort of like compound interest. At the end of 20 years the conservation done in the first year will still be contributing savings.
In the trinity of Conservation, Efficiency, and Renewables, Conservation is King, but we no longer have the luxury of putting these into practice one at a time. We need to tackle climate chance with everything we've got.

As for the electric grid, the Intergovernmental Panel on Climate Change (IPCC) says:
"Adaptation and mitigation are two complementary strategies for responding to climate change. Adaptation is the process of adjustment to actual or expected climate and its effects in order to either lessen or avoid harm or exploit beneficial opportunities. Mitigation is the process of reducing emissions or enhancing sinks of greenhouse gases (GHGs), so as to limit future climate change. Both adaptation and mitigation can reduce and manage the risks of climate change impacts."
Long-term mitigation decisions made today may negatively impact the ability to adapt to a climate-changed world of increasing weather extremes. Certain mitigation technologies may actually interfere or even preclude later adaptation choices. A grid designed exclusively for climate change mitigation may be totally inadequate to meet other challenges such as cyber threats and fuel supply interruption/cost escalation, including climate change adaptation. For instance, importing power from distant locations for mitigation runs counter to our adaptation efforts and may even displace what might be better, local mitigation choices.

With increasingly rapid advances and cost decreases in technology, such as energy storage, there is also the risk of investing huge amounts of current capital into what may relatively soon become obsolete. Interested individuals, groups, policymakers and regulators should be acutely aware that large, expensive transmission projects, nuclear plants, natural gas lines and even distant wind facilities could become the stranded cost of the not-so-distant future.

#18

PAGE 1

Q1: First Name (optional)	David
Q2: Last Name (optional)	Agnew
Q3: Company or Organization - if applicable (optional)	Cape Downwinders Cooperative
Q8: Which emission source(s) does your comment address	Electricity Generation & Distribution

Q9: Please type your comment below.

Nuclear energy has never been clean energy. Show me a single nuclear reactor which has not contaminated it's environment with radionuclides, some of the most toxic of all proven carcinogens. Is there a nuclear reactor in the nation which has demonstrated the ability to safely isolate it's high-level waste for the million years that the EPA deems necessary? No. In fact there is no working PLAN to do so, and the federal government's attempt to do so with weapons waste was successful for just 15 years before contaminating a nearby town with plutonium. Nuclear reactors emit dozens, if not hundreds, of radionuclides routinely, and after 7 decades there is no acceptable plan to deal with the waste. Nuclear requires uranium fuel. Our nation is littered with hundreds of small mountains of uranium mill tailings, at which uranium dust which blows about freely in the wind. These tailings will remain carcinogenic for billions of years. Is this what the state means by clean energy?

Nuclear reactors routinely release chemicals which are introduced into it's water waste stream as corrosion inhibitors and algae killers, and they release about 1/3 of all heat generated into the environment.

Perhaps DEP is looking only at carbon emissions. The Sovacool survey of 103 studies of life-cycle carbon emissions from nuclear reactors found average life cycle emission of 66 g CO2e/kWh. Nuclear emits considerably less carbon than coal, oil, or even natural gas. But that does not make it clean. Electrical generation by photovoltaics, wind, hydro, geothermal, wave, ocean-swell and biomass are all far cleaner than nuclear, and most of these technologies are becoming cheaper with each passing month. Canada has plenty of hydroelectric capacity to offer.

#19

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Q1: First Name (optional)	Meg
Q2: Last Name (optional)	Wickwire
Q3: Company or Organization - if applicable (optional)	*Respondent skipped this question*
Q8: Which emission source(s) does your comment address	Building Fuels & Energy Efficiency , Electricity Generation & Distribution , Natural Gas Distribution System Leaks , Transportation, Land Use & Smart Growth , Sulfur Hexafluoride (SF6) Leaks from the Electric Distribution System , Other (please specify) All issues relating to improving our

Q9: Please type your comment below.

Hi,

I am hoping to attend the hearing next Wednesday, but I wanted to submit my opinion in writing, too. I am a member of Mothers Out Front, and my ten-year-old son is a committed environmentalist. Please do all you can to go ABOVE the requirements of the Global Warming Solutions Act. We all know there is NO TIME.

Improvements in our power grid (greener generation) have to happen WHILE we're also addressing our transportation efficiency (pretty lame in the Boston area). I have trouble even mentioning the gas leaks--come on! How is it even legal that those leaks are happening? A company should not get to harm public health while they are making a profit off of that same public. Fixing leaks is a no-brainer, and it won't happen without clear, firm legislation.

Lastly, my son has asthma. Dirty air is a real and disturbing threat to his life, not just his temporary health. Please do the right thing and work hard to make sure my son will have a lifetime of sustainable living and not a broken world to fix.

Thanks,
Meg Wickwire

#20

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Q1: First Name (optional)	John
Q2: Last Name (optional)	Nichols
Q3: Company or Organization - if applicable (optional)	*Respondent skipped this question*
Q8: Which emission source(s) does your comment address	Other (please specify) nuclear energy

Q9: Please type your comment below.

Nuclear power should not be included as an acceptable energy source in the Clean Energy and Climate Plan for 2020, because its total life-cycle production of greenhouse gases is greater than that is greater than that of some or all renewable sources according to research by Benjamin Sovacol (1) and studies collected by Wikipedia (2). Further, nuclear power poses dangers of accidents and terrorism that renewable technologies don't pose, particularly because each of the about 100 operating U.S, nuclear plants and each closed plant has its own nuclear waste storage site (dump), each posing its own risk of terrorism (there being no central waste storage site). Moreover including it in the standard will support continued operation of the failure-prone Pilgrim nuclear plant, which has a long history of component failures and emergency shutdowns (SCRAMS), including at least 22 Scrams and equipment failures 2003-2015 according to a compilation by PilgrimCoaltion.org (3), and 13 failure-caused shutdowns so far in 2016 according to PilgrimWatch director Mary Lampert (4). Further, Pilgrim is rated by the Nuclear Regulatory Commission as one of the three worst-performing plants in the country, and Pilgrim, independent of its greenhouse-gas footprint, contributes to global warming another way—by discharging 500,000 gallons of heated water daily into Cape Cod Bay (5).

For the above reasons, Nuclear Energy should not be included as an acceptable energy source in the Clean Energy and Climate Plan for 2020.

(1) Sovacol, Benjamin K. (2008). "Valuing the greenhouse gas emissions from nuclear power: A critical survey" (PDF). Energy Policy. 36: 2950–2963. doi:10.1016/j.enpol.2008.04.017.

(2) https://en.wikipedia.org/wiki/Life-cycle_greenhouse-gas_emissions_of_energy_sources

(3) http://pilgrimcoalition.org/shutdown

(4) http://www.bostonglobe.com/metro/regionals/south/2016/10/28/should-pilgrim-nuclear-power-station-closed-now/8iObVKw5FOgr7tJhZywEyI/story.html

(5) http://jonesriver.org/getfile/ccbw/2015-water-pollution-report/Water_Pollution_Report_2015June8.pdf

#21

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Q1: First Name (optional)	Joel
Q2: Last Name (optional)	Wool
Q3: Company or Organization - if applicable (optional)	Clean Water Action
Q8: Which emission source(s) does your comment address	Natural Gas Distribution System Leaks , Other (please specify) Other Sources of Fugitive Methane Emissions

Q9: Please type your comment below.

Thank you to the Department of Environmental Protection for working to develop Global Warming Solutions Act regulations as per the requirements of section 3(d). Clean Water Action has worked for years to enforce the GWSA and specifically on the issue of gas distribution pipeline leaks. Methane pollution from gas leaks is a highly impactful pollutant. We are pleased to write in support of regulation of fugitive methane emissions

pollutant. We are pleased to write in support of regulation of fugitive methane emissions.

In summary, our recommendations are as follows:

1. DEP should issue regulations that define or delineate a process for defining “superemitter” leaks and other leaks of “significant environmental impact,” in conjunction with ongoing peer-reviewed research on the topic. As research on this topic is in-progress and slated to be completed within the statutory requirement to reduce emissions, DEP should partner with independent researchers in developing final regulations.

2. DEP should issue declining limits that extend beyond 2020.

3. DEP should regulate sudden releases of methane emissions by requiring gas industry stakeholders to (1) decline emissions from gas venting and (2) ensure access to emergency shut-off valves, with financial penalty for failing to do so.

4. DEP should ensure regulations cover reduction of fugitive emissions from gas compressor stations, metering and regulating stations, gas storage and liquefied natural gas facilities. In preparing for further reductions, DEP should also consider regulations for reduction of indoor gas leaks.

5. The Baker administration should direct the Department of Public Utilities to cap and reduce charges for lost and unaccounted for gas, which would immediately incentivize repairs that reduce greenhouse gas emissions. DEP should consider its own ability to issue regulations in this regard, and can additionally advise DPU to initiate this process and support rate design changes that would encourage greenhouse gas reduction. Alternatively, DEP could issue fines on distribution utilities for fugitive emissions.

6. DEP should issue regulations on tree protection with specific regard to gas distribution pipeline leaks. This is a climate issue not only because trees absorb Carbon Dioxide, but because tree planting is funded through state/utility energy programs including Alternative Compliance Payments.

DEP is required to determine declining emission caps on sources or categories of sources of emissions. To effectively instate these firm limits on pollution from fugitive emissions, DEP must work in conjunction with the Department of Public Utilities and non-governmental stakeholders to establish clear definitions, leak detection methodology, and data reporting or verification where such items are not clearly defined in statute, or, alternatively, update regulations where current policy is inadequate or does not allow for sufficient decline in emissions by 2020.

Currently, gas distribution leaks (one source of fugitive emissions) are graded according to hazard or potential hazard. Although some non-hazardous (grade 3) leaks, are eventually captured in targeted infrastructure replacements plans, some of these leaks go unrepaired or emit huge volumes of methane for years before being repaired. Grade 3 leaks often pollute more, not less, than hazardous leaks, which may be hazardous precisely because they are tightly contained.

Final DEP regulations on fugitive emissions should be informed by peer-reviewed research. DEP’s regulations should be flexible enough to allow for adjustments to accommodate improvements in leak detection technology. This is particularly important in approaching leaks of “significant environmental impact,” e.g. superemitter leaks. “Superemitter” is a term commonly used across various sectors of the gas industry to indicate sources of emissions of an extraordinary high volume, such as a leak at a drilling well or gas distribution line, with disproportionate climate impact when compared to other leaks of the same origin.

Researchers from Boston University, Harvard University, the Environmental Defense Fund, Home Energy Efficiency Team (HEET) and Gas Safety USA have pioneered gas distribution leak detection and mapping. A set of independent researchers from the named entities are currently piloting efforts to detect and monitor high-volume leaks in a fashion that would be useful for present regulation. We urge the DEP to collaborate with this research and adapt final regulations to incorporate results from this study. Basic protocols for measurement, however, could be informed by prior research, including that of Boston University’s Nathan Philips & Margaret Hendrick (http://www.sciencedirect.com/science/article/pii/S0269749116300938). To date, research on superemitters suggests that measurement incorporating the surface area of the leak are more accurate than those obtained from a measurement via a single drill hole.

DEP can ensure effective local and system-wide reductions in greenhouse gas emissions by cross-checking a variety of data, including but not limited to:
-Quantified repairs of identified supermitter leaks &/o leaks of “significant environmental impact” with estimated volumetric reductions per repair;

-High-elevation monitoring - environmental reduction of gas containing tracers like ethane would evidence general progress toward the 2020 goals and declining caps set by DEP. Such monitoring systems already exist in the Boston area and have been used in prior research on gas distribution infrastructure;
-Reductions in top-down calculations (essentially, differences between gas system inputs and outputs) as described by ICF international http://www.mass.gov/eea/docs/dpu/gas/icf-lauf-report.pdf);
-Other data as available

DEP should regulate sudden releases of methane emissions by requiring gas industry stakeholders to decline emissions from gas venting. DEP should also help prevent sudden, accidental releases of methane by ensuring access to emergency shut-off valves, with financial penalty for failing to do so. Many gas shut-off valves are currently inaccessible because they have been covered by paving projects or otherwise obstructed, creating a hazard for both workers and the environment. Utilities should be directed to restore access to gas valves, and verify that they have done so, when engaging in public roadwork or infrastructure projects. Current statute offers no enforcement mechanism and thus produces few results.

Financial disincentives for gas leak repair have remained problematic as consumers bear the cost of lost and unaccounted for gas. Reducing charges for lost and unaccounted for gas would directly incentivize utilities to accelerate leak repair, particularly for high-volume leaks, while creating a co-benefit of protecting consumers' investment in system reliability. DEP, in partnership with other Departments under the Baker administration, should work to eliminate consumer charges for lost and unaccounted for gas. If DEP lacks authority to engage directly on this issue, DEP could (1) issue fines based on volume of fugitive emissions and/or (2) provide pertinent input on DPU gas and rate design dockets.

Finally, DEP can interpret leaks of "significant environmental impact" to extend beyond raw methane emissions to other environmental concerns with climate impact. The Department of Energy Resources and Energy Efficiency Advisory Council has previously authorized Alternative Compliance Payments (ACP) funds to support tree planting for purposes of energy efficiency. Trees cool neighborhoods and absorb carbon dioxide and leaking gas, a pollutant in its own right, is also a known source of tree death. DEP can on the one hand ensure utilities compensate municipalities or the Commonwealth for tree death and on the other hand offer guidance or regulation on tree planting to cities and towns. A major issue in the past has been lack of access to accurate and timely gas leaks data for public works or forestry officials engaged in tree planting.

Thank you for the opportunity to provide comment on these important regulations.

#22

PAGE 1

Q1: **First Name (optional)**	Margaret
Q2: **Last Name (optional)**	Cherne-Hendrick
Q3: **Company or Organization - if applicable (optional)**	Institute for Sustainable Energy, Boston University
Q8: **Which emission source(s) does your comment address**	Natural Gas Distribution System Leaks

Q9: **Please type your comment below.**

Thank you to the Department of Environmental Protection for the opportunity to offer my comments.* I helped lead a Boston University study aimed at quantifying fugitive methane (CH4) emissions from leaks across natural gas

Boston University study aimed at quantifying fugitive methane (CH4) emissions from leaks across natural gas distribution infrastructure in greater Boston in 2013 and 2014, and I am pleased to offer my support towards regulation of these emissions today.

Methane is the main constituent of natural gas and is evaluated by the Intergovernmental Panel on Climate Change as being 86 times more potent as a heat trapping gas in Earth's atmosphere when compared to CO2 (over a 20-year time horizon). According to the Environmental Protection Agency, CH4 now accounts for 11% of all U.S. greenhouse gas (GHG) emissions, approximately 33% of which are attributable to natural gas and petroleum systems.

My colleagues and I at Boston University conducted a study in greater Boston in 2013 and 2014 during which we measured CH4 emissions from gas leaks in aged cast iron natural gas distribution pipelines at 100 randomly selected sites. This study is now published in the peer-reviewed journal, Environmental Pollution.

Cast iron pipes are old and leaky, with many dating back to the mid 1800s to early 1900s, and they make up about 1/3 of Massachusetts' distribution infrastructure. Many urban mapping studies now indicate that Eastern U.S. cities content with thousands of natural gas leaks. However, the Pipeline and Hazardous Materials Safety Administration (PHMSA) and the Department of Public Utilities (DPU) currently classify natural gas leaks into three grades according to explosive potential, Grade 1 through 3, with Grade 1 being the most dangerous. Notably, this classification system does not account for the climate impact from CH4 emissions released by natural gas leaks.

Our study in greater Boston revealed that not all natural gas leaks emit the same volume of CH4 gas. During our survey we found a preponderance of small gas leaks and a few, very large leaks, which are referred to as 'superemitters' in the scientific literature. Specifically, we found that 7% of gas leaks surveyed in greater Boston contributed 50% of the total CH4 emissions that we measured during the study. This phenomenon is not unique to leaks from aged distribution mains. Superemitter leaks from all types of natural gas equipment have now been described across every sector of the natural gas industry, from the point of extraction to the point of consumption.

Quantifying and regulating CH4 emissions from leaks across natural gas distribution systems in Massachusetts provides the Department of Environmental Protection (DEP) with an elegant strategy for expediting the reduction of GHG emissions under Section 3(d) of the Global Warming Solutions Act. Identifying and fixing superemitter leaks specifically, many of which qualify as those described as having "significant environmental impact" in House Bill No. 4568, is the fastest and most cost effective means of regulating natural gas leaks to realize declining CH4 emissions over time.

In order to accomplish this task the DEP should:

Short term (2018-2020)
• Implement a leak classification system in partnership with the DPU that accounts for both the explosive potential and climate impact (volume of CH4 gas released over time) of a gas leak:
o Natural gas utility companies, under DEP and DPU oversight and with input from environmental institutions and academic partners, should determine an acceptable proxy measurement for CH4 emissions from individual leak sites such as the surface area covered by a leak.
o CH4 emission proxy data should be reported by utilities to the state on an annual basis, along with all leak survey data, as mandated by House Bill No. 4164.
o Emissions proxy data should be incorporated into state and municipal GHG inventories in order to track progress over time. Compare bottom-up proxy data to top-down CH4 inventories like that produced by McKain et al. (2015).

• Develop criteria to identify superemitter leaks/ leaks of significant environmental impact in partnership with the DPU:
o Within the scientific literature, the "5−50 rule" is now recommended when defining superemitter leaks. It states that for a given source category, the largest 5% of leaks should be expected to account for at least 50% of total emissions.
o Our survey suggests that the volume of CH4 gas released from a leak site increases with increasing pipeline operating pressure, indicating that superemitter leaks may occur with higher frequency over pipes operating at higher pressure. Long-lived grade 3 leaks located in intermediate pressure pipes should be surveyed first.
o Survey the full environmental impact, especially to trees, associated with superemitter leaks.

• Convene an expert advisory group to identify technology and methodology to be used by the utilities to replace proxy techniques in order to accurately measure and report the volume of CH4 gas escaping from individual leaks sites.

Long term (2020+)
• With oversight from the DPU, natural gas utilities should implement the technology and methodology recommended by the expert advisory group to accurately measure and report the volume of CH4 gas escaping from individual leaks sites (absolutely no later than 2020).

• Cap emissions from natural gas systems within Massachusetts, as determined by top-down and bottom-up surveys, and require a percentage of superemitter leaks to be fixed each year.

Stemming fugitive CH4 emissions from natural gas distribution systems by targeting superemitter leaks is an effective way to meet the state's GHG reduction targets and would position the state as a leader in developing GHG mitigation policy and technology.

Thank you very much for the opportunity to provide comments on these important regulations.

*A fully referenced version of these comments is available upon request.

#23

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Q1: **First Name (optional)**	Irene
Q2: **Last Name (optional)**	Paine
Q3: **Company or Organization - if applicable (optional)**	*Respondent skipped this question*
Q8: **Which emission source(s) does your comment address**	Building Fuels & Energy Efficiency , Other (please specify) Definition of Clean Renewable Energy

Q9: Please type your comment below.

Dear Massachusetts DEP:

We citizens of Massachusetts really are trying hard to reach our carbon reduction goals in order to slow the effects of climate change. And while we do that by bringing into the electric grid more and more clean energy technologies from wind power to solar power to water power, we want to be very careful not to trade one huge problem for another.

Nuclear power stations should never be considered as the providers of clean electric energy. The resulting radioactive spent fuel stores will be radioactive for thousands of years, longer into the future than the pyramids were built in the past. We have no proper, safe and secure way to store such dangerous results of our present quest for more and more electric power in every household, and for every industry.

Every nuclear power station in the nation is waiting for the federal government to come up with the answers on how to transport and store radioactive waste, and the answers are just not coming, resulting in each nuclear generator of power having to store their own radioactive waste. This was never meant to be the case. Our Pilgrim Nuclear Power Station out here on the shores of Cape Cod Bay was not sited to be a waste dump when it was originally licensed. But that is exactly what it has become.

The station, rated one of the worst in the nation, has been closed down many times since the beginning of this year for safety reasons and repairs. During those times when electricity was not being generated, we all survived. There were no brown outs during the summer.

If all of us cut back ten percent on the power we use, the contribution of Pilgrim is not even necessary at all. Entergy should just close up now, and go back to Louisiana, in my opinion. The jobs in Plymouth are not worth the extreme risk to Plymouth and far beyond. How horrible that America's hometown, almost 400 years old now, is host to such a dangerous corporate facility.

At the same time, Eversource is making proposals for a smart grid down here on Cape Cod, I believe that the proposed smart grid should give consumers the option to choose less expensive power usage in the evening, and to run their dishwashers and electric dryers at night, thus saving on daytime use and consumption of power. I remember my grandparents being electrically frugal in this way. Sounds like I'm changing the subject, but it's all related to the great American appetite for power. We can go on a diet, as other countries have.

And we can choose truly renewable and green power sources as we go forward. My final plea: let us do the moral thing and get nuclear power totally out of the mix before catastrophic events occur, causing relocation (not just evacuation) of a great segment of the Massachusetts population (and businesses) to other areas and states. Many catastrophes in this world- hurricanes, floods, earthquakes- are caused by mother nature, and are beyond immediate human control. But the shuttering of a nuclear power station, and the safe storage in the most secure methods we presently have to use. . . this is totally in human hands, and thus catastrophic nuclear accidents can be prevented.

Let's not even think of including nuclear powered electricity into our future plans.

Thank you, Irene M. Paine
24 Gooseneck Road, Yarmouth Port, MA 02675 (30 miles from Pilgrim across Cape Cod Bay).

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#24

PAGE 1

Q1: First Name (optional)	Lisa
Q2: Last Name (optional)	Fitzgibbons
Q3: Company or Organization - if applicable (optional)	Mothers Out Front
Q8: Which emission source(s) does your comment address	Building Fuels & Energy Efficiency , Electricity Generation & Distribution , Natural Gas Distribution System Leaks , Transportation, Land Use & Smart Growth

Q9: Please type your comment below.

Please be bold in setting limits for greenhouse gas emissions in Massachusetts. Climate change is an existential threat that requires urgent action. I support setting limits today, even if expensive and inconvenient, that provide a livable planet for our kids and grandkids in 20, 50, or 100 years. Mitigation today will be less costly and disruptive than adaptation tomorrow.

We should be taxing carbon, greening our electric grid via renewable sources, transitioning to electrified heating, cooling and transportation, and reducing our demand for energy via efficiency and conservation measures. Simultaneously, we must protect open spaces and work to sequester carbon by restoring and promoting our natural systems.

Regarding natural gas leaks, please accelerate identifying and fixing "super-emitters." Please demand that the utilities replace corroded pipes in a faster time frame. (20-25 years is unacceptable given that methane is a potent greenhouse gas.)

Thank you!!

#25

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Q1: First Name (optional)	Rachel
Q2: Last Name (optional)	Wyon
Q3: Company or Organization - if applicable (optional)	Mothers Out Front
Q8: Which emission source(s) does your comment address	Other (please specify) Gas Pipelines

Q9: Please type your comment below.

Mass DEP must do everything possible to demand the utilities fix gas leaks AND stop the construction of new infrastrucure for fossil fuels. This includes "natural" but really fracked gas pipelines. These pipelines will set the stage for extraction of millions of gallons of gas for export, poisoning soil, water air and speeding climate change. We must take a stand to stop gas leaks today and pipelines tomorrow and in the future.

I am a mother and grandmother and all children are precious to me. It's our responsibility to do everything possible to leave them a livable climate.

#26

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Q1: First Name (optional)	Mary
Q2: Last Name (optional)	Lampert
Q3: Company or Organization - if applicable (optional)	Pilgrim Watch
Q8: Which emission source(s) does your comment address	Other (please specify) CES-nuclear

Q9: Please type your comment below.

PILGRIM WATCH COMMENT ON REDUCING GHG EMISSIONS UNDER SECTION 3(D) OF THE GLOBAL WARMING SOLUTIONS ACT (November 2, 2016)

Pilgrim Watch (“PW”) is a non-profit citizen’s organization that serves the public interest on issues regarding the Pilgrim Nuclear Power Station specifically and on nuclear power in general. The organization is in Duxbury, Massachusetts. Its membership extends throughout the Commonwealth.

Pilgrim Watch does not support current or any future nuclear reactors qualifying as eligible clean energy generators. They have been feeding at the trough long enough to the detriment of consumer prices, the environment and development of truly clean energy alternatives. The proposed standard properly does not propose to include existing generators in the CES, even if they meet the emissions-based threshold; but DEP improperly backtracked and is re-reviewing this in 2016.

Eligible Clean Technologies
The Clean Energy Standard should not allow nuclear power plants to qualify
Including Nuclear plants defeats the purpose of the CES as shown by MassDEP’s commissioned Synapse Study. The purpose of the CES is to achieve the following:
• A CES would provide a long-term incentive to deliver increasing amounts of clean electricity to consumers in Massachusetts.
• The CES would ensure ongoing progress toward reducing greenhouse gas emissions by 80% by 2050, as required by the Massachusetts Global Warming Solutions Act of 2008.
• The CES would address the Clean Energy Performance Standard strategy in the Massachusetts Clean Energy and Climate Plan for 2020.
• A CES would complement other clean energy strategies to reduce the price increases and volatility associated with our dependence on fossil fuels, grow clean energy jobs, and improve the environment.

MassDEP commissioned a report from Synapse Energy Economics in 2013 in order to prepare its draft regulation. It showed that including nuclear in the CES would provide windfall profits to nuclear facilties; not result in a change in regional emissions; increase customer's utility bills; and allow reactors to continue to operate by providing them with yet another subsidy.

Specifically the report showed:

The likely outcome of including nuclear generation in a CES would be windfall profits to nuclear facilities. Providing rewards to nuclear plants will not increase nuclear generation in New England. With nuclear facilities assigned CECs, there is no change in regional emissions, but residential customers nonetheless see their utility bills grow by 4 percent in 2020 and 6 percent in 2030 with respect to the Reference Case (see Table ES-1 (Synapse, pg., 4)

Further, Synapse showed that the "CES Does Not Reduce Emissions If Nuclear Power is Assigned CECs. Assigning CES credit to existing nuclear generation adds 30,000 CECs to the Policy Case." Pgs., 14-15. CES compliance can be satisfied with no change in dispatch or investment in new resources, and, therefore, no reduction in emissions (see Table 4). The simple reason for this is that because reactors are large units, they would receive numerous credits. The credits in turn could be sold to the dirtiest polluters to enable them to continue operating "business as usual" spewing carbon into the air

Synapse concludes (at 15) that, "Even though no actual emission reduction is stimulated in this scenario, residential customers see their utility bills grow by 9 percent in 2020 and 13 percent in 2030 with respect to the Reference Case. The likely outcome of including nuclear generation in a CES would be windfall profits to nuclear facilities. Providing rewards for nuclear generation will not prompt the construction of new nuclear facilities in New England (due to regulatory, cost, and political hurdles), although it may serve to prolong the life of existing facilities. The remaining scenarios shown in this report assume that existing nuclear generation will not be assigned CES credit."

Providing existing or new nuclear reactors with CESs would provide a huge supply of credits to allow the dirty polluters to continue operating and spewing carbon into the atmosphere. Providing CES credits would breathe new life into the nuclear industry placing citizens at risk-all it takes is one bad day and despite the probability of an accident the consequences are too great as Fukushima showed- and adding to the stockpile of ncuelar wastes that remain lethal for thousands of eyars and have no permanent storage solution.

The Standard should continue to not allow existing Generators to receive credits

The proposed standard properly did not propose including existing generators in the CES, even if they meet the emissions-based threshold. The Technical Support Document for the standard explains why.

First, including existing generators could result in "resource shuffling." (Resource shuffling, as documented in the Synapse study, refers to the shifting of contractual arrangements to reflect additional clean energy purchases without any corresponding change in generation or emissions.) Second, including existing generators would result in "windfall profits" for some or all existing generators, and associated costs to ratepayers. (Windfall profits, as discussed in the Synapse study, are profits that result when already profitable activities, such as continued operation of existing power plants, are subsidized at ratepayer expense.) Third, existing ownership and contractual relationships between MLPs and existing low and zero-emissions generators may complicate options for addressing existing generators. Fourth, as noted above a large number of stakeholders objected to including existing nuclear power plants in the CES.

DEP did an about face. The most recent technical document says that, "MassDEP is proposing a regulatory requirement for MassDEP to review options for addressing existing low and zero-emissions generators in the CES in 2016." This is bad policy. The only apparent reason for the change of heart or "re-review" of the issue were comments submitted primarily by Entergy and Exelon There should be no change.

First Massachusetts can meet its carbon reduction goals without changing course and including existing nuclear plants. Massachusetts plan will bring considerable carbon-free energy to Massachusetts-hydropower from Canada, solar is growing, and expanding the state's net-metering program would allow homeowners and businesses to get credit for extra solar power they supply to the electric grid will spur more solar development. Offshore wind, whose price has dropped in recent years, is set to become a real option for the region. Investing in new electrical transmission to Massachusetts will allow access to much large amounts of wind and hydro power at competitive prices. Energy efficiency has made considerable strides also.

According to the Union of Concerned Scientists' President Ken Kimmell, "Some projections estimate as much as 2,000 megawatts of wind can be developed in the region and another 2,000 megawatts of hydropower could be imported into the state. Doing so could save consumers $600-900 million a year. This would more than make up for the loss of energy from Pilgrim, for example, (690 megawatt capacity), and enable Massachusetts to meet its carbon reduction obligation for 2020 and beyond." There is no need to reverse course.

PW does not support current or any future nuclear reactors qualifying as eligible clean energy generators. They have been feeding at the trough long enough to the detriment of consumer prices, the environment and development of truly clean energy alternatives

Is It Fair to Exlude existing or furture nuclear reactors In MassDEP's Clean Energy Credits?

Exelon's and Entergy's comments to the Draft CES boiled down to complaints that "It's not fair" to exclude nuclear reactors from the CES. But, what is not fair is that clean energy sources have not received the subsidies that nuclear power has received for decades and continues to get.

Nuclear power has and continues to receive huge subsidies; and it still cannot make money in market economies. Nuclear reactors make rates higher than they should ever be. First, the industry received massive subsidies at its inception, reducing both the capital costs it needed to recover from ratepayers (the "legacy" subsidies that underwrote reactor construction through the 1980s) and its operating costs (through ongoing subsidies to inputs, waste management, and accident risks). Second, when industry restructuring revealed that nuclear power costs were still too high to be competitive, so-called stranded costs were shifted to ratepayers, allowing the reactors to continue operating. Pilgrim's stranded costs exceeded one billion dollars and allowed Entergy to buy Pilgrim for a song. In addition to legacy subsidies, the industry continues to benefit from subsidies that offset the costs of uranium, insurance and liability, plant security, cooling water, waste disposal, and plant decommissioning.

Despite the unequal subsidies for nuclear reactors, they still cannot make it in market economies. It is time to level the playing field and give a lift to energy sources that are truly clean, cheaper, and reliable, and create jobs for Massachusetts.

Nuclear power should not be eligible for inclusion in a renewable portfolio standard. Nuclear power is an established, mature technology with a long history of government support. Furthermore, nuclear plants are unique in their potential to cause catastrophic damage (due to mechanical or human error, sabotage, or terrorism); it produces very long-lived radioactive wastes with no forwarding address; and it exacerbates nuclear proliferation.

Respectfully submitted,
Mary Lampert
Pilgrim Watch, director
November 2, 2016

#27

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Q1: **First Name (optional)**	Dorothy
Q2: **Last Name (optional)**	Anderson

Q3: Company or Organization - if applicable (optional)	*Respondent skipped this question*
Q8: Which emission source(s) does your comment address	Natural Gas Distribution System Leaks

Q9: Please type your comment below.

When I walk on my street, River St. North Weymouth, MA, I smell gas in front of number 226. All over the commonwealth gas is leaking adding methane to our atmosphere. We need gas leaks fixed not new pipelines and compressors stations like the one they are going to build at the Fore River Bridge. Laws should be passed to force the gas companies to fix leaky pipes, now not later. Work has been much too slow in that regard and our air is being poisoned and global warming is increasing.

#28

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Q1: First Name (optional)	Andrea
Q2: Last Name (optional)	Winslow
Q3: Company or Organization - if applicable (optional)	Mothers Out Front
Q8: Which emission source(s) does your comment address	Natural Gas Distribution System Leaks

Q9: Please type your comment below.

I recently learned that there are about 177 natural gas leaks in Arlington. I have been talking to residents who say they can smell the gas!
The methane from the leaks is bad for our health and bad for our natural surroundings.
What angers me is that we are paying for this leaking gas!
Why are we footing the bill for this?
If the utility company was paying for it, I would imagine they would find ways to fix these leaks.
We must curtail or stop completely our reliance on fossil fuels. Our time is running out. We must slow down global warming. Our children's lives are at stake.
Very concerned citizen,
Andrea Winslow
Arlington,MA

#29

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Q1: First Name (optional)	*Respondent skipped this question*
Q2: Last Name (optional)	*Respondent skipped this question*
Q3: Company or Organization - if applicable (optional)	*Respondent skipped this question*
Q8: Which emission source(s) does your comment address	Natural Gas Distribution System Leaks

Q9: Please type your comment below.

I am writing to express my concern about the number of gas leaks that have gone unattended by the utility companies in Massachusetts.

Recently it has come to my attention that there are at least 177 Natural Gas leaks in the town of Arlington alone and approximately 20,000 statewide. There are streets in Arlington where one can actually smell the leaking gas.

The methane from the Natural Gas leaks is bad for our health, bad for the plant life around us, adds to the warming of the planet and could pose a safety hazard. Also, we, the consumers, are the ones paying for lost and unaccounted for gas.

For all these reasons, we need strict regulations to ensure that the gas companies fix all gas leaks. Identifying and fixing the largest leaks (the "super-emitters") should happen as soon as possible, but we also want all other gas leaks fixed in a timely manner.

#30

PAGE 1

Q1: First Name (optional)	Jane
Q2: Last Name (optional)	Herr

Q3: Company or Organization - if applicable (optional)	*Respondent skipped this question*
Q8: Which emission source(s) does your comment address	Natural Gas Distribution System Leaks

Q9: Please type your comment below.

Dear MA DEP,

I am writing to express my concern about the number of gas leaks that have gone unfixed in my town, Arlington, MA. I recently learned that there are at least 177 Natural Gas leaks in the town of Arlington alone. And in fact two of them are on my block, and one is right in front of my house!

The methane from the Natural Gas leaks is a terrible environmental mess adding to global warming - plus I don't care to be breathing it in as I'm gardening in my front yard, and my kids are riding their bikes or scooters up and down our driveway and up and down the sidewalk in front of my house!

We need these fixed, which means we need stricter regulations for the utilities to fix these gas leaks (that they already know about!).

Sincerely,
Jane Herr

#31

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Q1: First Name (optional)	*Respondent skipped this question*
Q2: Last Name (optional)	*Respondent skipped this question*
Q3: Company or Organization - if applicable (optional)	*Respondent skipped this question*
Q8: Which emission source(s) does your comment address	Natural Gas Distribution System Leaks

Q9: Please type your comment below.

I am writing to express my great concern about the number of gas leaks that have gone unattended by the utility companies in Massachusetts. I live in Arlington, MA and have noticed, while walking around town, a number of gas leaks, which is very concerning to me. One such leak I pass regularly just a couple blocks away from our house.

Recently it has come to my attention that there are at least 177 Natural Gas leaks in the town of Arlington alone and approximately 20,000 statewide.

The methane from the Natural Gas leaks is bad for our health, bad for the plant life around us, adds to the warming of the planet and could pose a safety hazard. Also, we, the consumers, are the ones paying for lost and unaccounted for gas. I am concerned for the health and safety of my family and those living around us, and for the health of our environment and protection of our precious resources.

For all these reasons, we need strict regulations to ensure that the gas companies fix all gas leaks. Identifying and fixing the largest leaks (the "super-emitters") should happen as soon as possible, but we also want all other gas leaks fixed in a timely manner.

Thank you sincerely for yourent time and attention to this matter.
Nora Dybdal

#32

PAGE 1

Q1: First Name (optional)	Deb
Q2: Last Name (optional)	Lewis
Q3: Company or Organization - if applicable (optional)	*Respondent skipped this question*
Q8: Which emission source(s) does your comment address	Natural Gas Distribution System Leaks

Q9: Please type your comment below.

I am concerned about the number of gas leaks in Arlington - and the huge number around the state. Not only do I object to our paying for wasted gas, I am very concerned about the methane emitted into the air - concerned for global warming and our health. I would like strong regulations requiring the gas company to fix these leaks.

#33

PAGE 1

Q1: **First Name (optional)**	David
Q2: **Last Name (optional)**	Landskov
Q3: **Company or Organization - if applicable (optional)**	Sustainable Arlington
Q8: **Which emission source(s) does your comment address**	Natural Gas Distribution System Leaks

Q9: **Please type your comment below.**

There are at least 177 Natural Gas leaks in the town of Arlington and approximately 20,000 statewide.

The methane from the Natural Gas leaks is bad for our health, bad for the plant life, adds to the warming of the planet, and could pose a safety hazard. Also, we, the consumers, are the ones paying for lost and unaccounted for gas.

We need strict regulations to ensure that the gas companies fix all gas leaks. Identifying and fixing the largest leaks (the "super-emitters") should happen as soon as possible, but we also want all other gas leaks fixed in a timely manner.

#34

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Q1: **First Name (optional)**	Nancy H.
Q2: **Last Name (optional)**	Gray
Q3: **Company or Organization - if applicable (optional)**	*Respondent skipped this question*
Q8: **Which emission source(s) does your comment address**	Natural Gas Distribution System Leaks

Q9: Please type your comment below.

I went out and marked several gas leaks and support Mothers Out Front and their effort to call attention to leaks. Fixing them seems a good way for gas companies to look good and surely it is not that hard to do. Thank you for taking note of my comments, and below.

I am writing to express my concern about the number of gas leaks that have gone unattended by the utility companies in Massachusetts.

Recently it has come to my attention that there are at least 177 Natural Gas leaks in the town of Arlington alone and approximately 20,000 statewide. There are streets in Arlington where one can actually smell the leaking gas.

The methane from the Natural Gas leaks is bad for our health, bad for the plant life around us, adds to the warming of the planet and could pose a safety hazard. Also, we, the consumers, are the ones paying for lost and unaccounted for gas.

For all these reasons, we need strict regulations to ensure that the gas companies fix all gas leaks. Identifying and fixing the largest leaks (the "super-emitters") should happen as soon as possible, but we also want all other gas leaks fixed in a timely manner.

#35

PAGE 1

Q1: First Name (optional)	Sandra
Q2: Last Name (optional)	Vorce
Q3: Company or Organization - if applicable (optional)	*Respondent skipped this question*
Q8: Which emission source(s) does your comment address	Natural Gas Distribution System Leaks

Q9: Please type your comment below.

I am writing to express my concern about the number of gas leaks in Massachusetts.

Recently it has come to my attention that there are at least 177 Natural Gas leaks in the town of Arlington alone and approximately 20,000 statewide. I live on a street in Arlington where we often actually smell the leaking gas.

The methane from the Natural Gas leaks is bad for our health, bad for the plant life around us, adds to the warming of the planet and could pose a safety hazard.

For all these reasons, we need to ensure that the gas companies fix all gas leaks. Identifying and fixing the largest leaks (the "super-emitters") should happen as soon as possible, but we also want all other gas leaks fixed in a timely manner.
Thank you for encouraging comments.

#36

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Q1: First Name (optional)	*Respondent skipped this question*
Q2: Last Name (optional)	*Respondent skipped this question*
Q3: Company or Organization - if applicable (optional)	*Respondent skipped this question*
Q8: Which emission source(s) does your comment address	Natural Gas Distribution System Leaks

Q9: Please type your comment below.

I am writing to express my concern about the number of gas leaks that have gone unattended by the utility companies in Massachusetts.

Recently it has come to my attention that there are at least 177 Natural Gas leaks in the town of Arlington alone and approximately 20,000 statewide. There are streets in Arlington where one can actually smell the leaking gas.

The methane from the Natural Gas leaks is bad for our health, bad for the plant life around us, adds to the warming of the planet and could pose a safety hazard. We end up not only paying the price on our health but also as consumers, we are the ones paying the cost of lost and unaccounted for gas.

For all these reasons, we need strict regulations to ensure that the gas companies fix all gas leaks. Identifying and fixing the largest leaks (the "super-emitters") should happen as soon as possible, but we also want all other gas leaks fixed in a timely manner.

Thank you,

Concerned Arlington resident

#37

PAGE 1

Q1: First Name (optional)	*Respondent skipped this question*
Q2: Last Name (optional)	*Respondent skipped this question*
Q3: Company or Organization - if applicable (optional)	*Respondent skipped this question*
Q8: Which emission source(s) does your comment address	Building Fuels & Energy Efficiency , Electricity Generation & Distribution , Natural Gas Distribution System Leaks , Transportation, Land Use & Smart Growth , Sulfur Hexafluoride (SF6) Leaks from the Electric Distribution System

Q9: Please type your comment below.

To the MassDEP about the gas leaks:

I am writing to express my concern about the number of gas leaks that have gone unattended by the utility companies in Massachusetts.

Recently it has come to my attention that there are at least 177 UNREPAIRED Natural Gas leaks in the town of Arlington alone and 497 UNREPAIRED Natural Gas leaks in Newton and approximately 20,000 statewide. There are streets in Arlington @ 367 Mystic St.where one can actually smell the leaking gas.

The methane from the Natural Gas leaks is bad for our health, bad for the plant life around us, adds to the warming of the planet and could pose a safety hazard. Besides, consumers are the ones paying for lost and unaccounted for gas.

For all these reasons, I believe we need strict regulations to ensure that the gas companies fix all gas leaks. Identifying and fixing the largest leaks (the "super-emitters") should happen as soon as possible, but we also want all other gas leaks fixed in a timely manner.

In the next few months and through 2017, I will be taking other actions to inform Newton residents to reduce the use and leakage of fossil fuels in Newton.

I plan to write letters to legislators about gas leaks, especially when a bill has been filed that addresses the problem.

We need direct attention to any and ALL “super-emitters” (especially large gas leaks) that are detected, and calling out National Grid if this utility does not fix them as is now required by law.

I plan on supporting community wide education forums to help spread the word about the dangers of Natural Gas and ways we can move toward renewable energy.

I plan on taking part in a joint action with other towns about gas leaks, tentatively scheduled for December 10-11.

I plan on helping towns educate residents about the Community Choice Aggregation plan to increase the amount of renewable energy that supplies our residential and business electricity in town, passed by Arlington Town Meeting last May; and encouraging residents to pay a little extra monthly to “opt up” to have even more renewables contribute to their household’s electricity.

I have been invited to attend Community Organizing Team (COT) meetings & I plan on attending meetings of group coordinator anneswright@gmail.com. of Arlington, MA Mothers Out Front.

Note: The results of Tuesday’s election call us even more strongly to action. People who want a clean energy future and environmental justice will need to stand together and work hard in the coming years for a clean energy future and healthy children and grandchildren.

Frances M. Scott
Newton, MA 02458-1901
stringsongs9@gmail.com.

#38

Q1: First Name (optional)	*Respondent skipped this question*
Q2: Last Name (optional)	*Respondent skipped this question*
Q3: Company or Organization - if applicable (optional)	*Respondent skipped this question*
Q8: Which emission source(s) does your comment address	Building Fuels & Energy Efficiency , Electricity Generation & Distribution , Natural Gas Distribution System Leaks , Transportation, Land Use & Smart Growth , Sulfur Hexafluoride (SF6) Leaks from the Electric Distribution System

Q9: Please type your comment below.

To the MassDEP about the gas leaks:

I am writing to express my concern about the number of gas leaks that have gone unattended by the utility companies in Massachusetts.

Recently it has come to my attention that there are at least 177 UNREPAIRED Natural Gas leaks in the town of Arlington alone and 497 UNREPAIRED Natural Gas leaks in Newton and approximately 20,000 statewide. There are streets in Arlington @ 367 Mystic St.where one can actually smell the leaking gas.

The methane from the Natural Gas leaks is bad for our health, bad for the plant life around us, adds to the warming of the planet and could pose a safety hazard. Besides, consumers are the ones paying for lost and unaccounted for gas.

For all these reasons, I believe we need strict regulations to ensure that the gas companies fix all gas leaks. Identifying and fixing the largest leaks (the "super-emitters") should happen as soon as possible, but we also want all other gas leaks fixed in a timely manner.

In the next few months and through 2017, I will be taking other actions to inform Newton residents to reduce the use and leakage of fossil fuels in Newton.

I plan to write letters to legislators about gas leaks, especially when a bill has been filed that addresses the problem.

We need direct attention to any and ALL “super-emitters” (especially large gas leaks) that are detected, and calling out National Grid if this utility does not fix them as is now required by law.

I plan on supporting community wide education forums to help spread the word about the dangers of Natural Gas and ways we can move toward renewable energy.

I plan on taking part in a joint action with other towns about gas leaks, tentatively scheduled for December 10-11.

I plan on helping towns educate residents about the Community Choice Aggregation plan to increase the amount of renewable energy that supplies our residential and business electricity in town, passed by Arlington Town Meeting last May; and encouraging residents to pay a little extra monthly to “opt up” to have even more renewables contribute to their household’s electricity.

I have been invited to attend Community Organizing Team (COT) meetings & I plan on attending meetings of group coordinator anneswright@gmail.com. of Arlington, MA Mothers Out Front.

Note: The results of Tuesday’s election call us even more strongly to action. People who want a clean energy future and environmental justice will need to stand together and work hard in the coming years for a clean energy future and healthy children and grandchildren.

Frances M. Scott
Newton, MA 02458-1901
stringsongs9@gmail.com.

#39

Q1: First Name (optional)	Frances
Q2: Last Name (optional)	Scott
Q3: Company or Organization - if applicable (optional)	*Respondent skipped this question*
Q8: Which emission source(s) does your comment address	Natural Gas Distribution System Leaks

Q9: Please type your comment below.

To the Mass DEP about the gas leaks, Nov. 11, 2016:

I am writing to express my concern about the number of gas leaks that have gone unattended by the utility companies in Massachusetts.

Recently it has come to my attention that there are at least 177 UNREPAIRED Natural Gas leaks in the town of Arlington and 497 UNREPAIRED Natural Gas leaks in Newton and approximately 20,000 statewide. There are streets in Arlington @ 367 Mystic St. where one can actually smell the leaking gas.

The methane from the Natural Gas leaks is bad for our health, bad for the plant life around us, adds to the warming of the planet and could pose a very serious safety hazard. Besides, consumers are the ones paying for lost and unaccounted for gas.

For all these reasons, I believe we need strict regulations to ensure that the gas companies fix all gas leaks. Identifying and fixing the largest leaks (the "super-emitters") should happen as soon as possible, but we also want all other gas leaks fixed in a timely manner.

In the next few months and through 2017, I will be taking other actions to inform Newton residents to reduce the use and leakage of fossil fuels in Newton.

I plan to write letters to legislators about gas leaks, especially when a bill has been filed that addresses the problem.

We need direct attention to any and ALL “super-emitters” (especially large gas leaks) that are detected, and we need to call out National Grid if this utility does not fix them as is now required by law.

I plan on supporting community wide education forums to help spread the word about the dangers of Natural Gas and ways we can move toward renewable energy.

I plan on taking part in joint action with other towns about gas leaks, tentatively scheduled for December 10 - 11.

I am very thankful for this gas leak alert info from group coordinator anneswright@gmail.com. of Arlington, MA Mothers Out Front.

I advocate for balanced natural human health. ALL humans require a clean energy future. I also advocate for environmental justice, standing together working hard in the coming years for a clean energy future for healthy humans, children & grandchildren everywhere.

Frances M. Scott
Newton, MA 02458-1901
stringsongs9@gmail.com.

#40

PAGE 1

Q1: **First Name (optional)**	Sarah
Q2: **Last Name (optional)**	Conn
Q3: **Company or Organization - if applicable (optional)**	*Respondent skipped this question*
Q8: **Which emission source(s) does your comment address**	Natural Gas Distribution System Leaks

Q9: **Please type your comment below.**

I am writing to express my concern about the number of gas leaks that have gone unattended by the utility companies in Massachusetts.

Recently it has come to my attention that there are at least 177 Natural Gas leaks in the town of Arlington alone and approximately 20,000 statewide. There are streets in Arlington where one can actually smell the leaking gas.

The methane from the Natural Gas leaks is bad for our health, bad for the plant life around us, adds to the warming of the planet and could pose a safety hazard. Also, we, the consumers, are the ones paying for lost and unaccounted for gas.

For all these reasons, we need strict regulations to ensure that the gas companies fix all gas leaks. Identifying and fixing the largest leaks (the "super-emitters") should happen as soon as possible, but we also want all other gas leaks fixed in a timely manner.

#41

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Q1: **First Name (optional)**	SUsan
Q2: **Last Name (optional)**	Donaldson

Q3: Company or Organization - if applicable (optional)	*Respondent skipped this question*
Q8: Which emission source(s) does your comment address	Natural Gas Distribution System Leaks

Q9: Please type your comment below.

First, thank you to DEP for proposing regulations on methane emissions and for extending regulations beyond 2030. We need this if we are to meet GWSA requirements and usefully address climate change.

However, I have concerns about with the methodology for determining emissions. The DEP's proposal is likely to discount "superemitter" leaks and likely underestimates total methane emissions. We need empirical measurements that combine top-down and bottom-up measurements, so that we know the numbers we get are as close as possible to the real emissions. If we're not measuring correctly, e can't judge emission reductions.

We also need to consider regulating gas venting and storage--there are other sources of methane leakage that we can't overlook.

#42

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Q1: First Name (optional)	*Respondent skipped this question*
Q2: Last Name (optional)	*Respondent skipped this question*
Q3: Company or Organization - if applicable (optional)	*Respondent skipped this question*
Q8: Which emission source(s) does your comment address	Natural Gas Distribution System Leaks

Q9: Please type your comment below.

Please fix the gas leaks, especially the 177 ones in Arlington Ma alone.

#43

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Q1: **First Name (optional)**	Meredith
Q2: **Last Name (optional)**	Dimola
Q3: **Company or Organization - if applicable (optional)**	*Respondent skipped this question*
Q8: **Which emission source(s) does your comment address**	Natural Gas Distribution System Leaks

Q9: **Please type your comment below.**

I am writing to express my concern about the number of gas leaks that have gone unattended by the utility companies in Massachusetts.

Recently it has come to my attention that there are at least 177 Natural Gas leaks in the town of Arlington alone and approximately 20,000 statewide. There are streets in Arlington where one can actually smell the leaking gas. Right near me kids school it smells daily.

The methane from the Natural Gas leaks is bad for our health, bad for the plant life around us, adds to the warming of the planet and could pose a safety hazard. Also, we, the consumers, are the ones paying for lost and unaccounted for gas.

For all these reasons, we need strict regulations to ensure that the gas companies fix all gas leaks. Identifying and fixing the largest leaks (the "super-emitters") should happen as soon as possible, but we also want all other gas leaks fixed in a timely manner.

#44

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Q1: **First Name (optional)**	Alisa
Q2: **Last Name (optional)**	Pascale
Q3: **Company or Organization - if applicable (optional)**	*Respondent skipped this question*
Q8: **Which emission source(s) does your comment address**	Natural Gas Distribution System Leaks

Q9: Please type your comment below.

I am writing to express my concern about the number of gas leaks that have gone unattended by the utility companies in Massachusetts.

Recently it has come to my attention that there are at least 177 Natural Gas leaks in the town of Arlington alone and approximately 20,000 statewide. There are a number of streets in Arlington, including ours, where one can actually smell the leaking gas.

One of these leaks is directly in front of our house!!! We and our neighbors have called about this leak many times. We even had a new gas line put in and suggested that the leak, just 2-3 feet away, be repaired at the same time the gas line was exposed, but were told "that is a different department" and once again, nothing was done and the leak continues.

The methane from the Natural Gas leaks is bad for our health, bad for the plant life around us, adds to the warming of the planet and could pose a safety hazard to us and our neighbors. Also, we, the consumers, are the ones paying for lost and unaccounted for gas.

For all these reasons, we need strict regulations to ensure that the gas companies fix all gas leaks. Identifying and fixing the largest leaks (the "super-emitters") should happen as soon as possible, but we also want all other gas leaks fixed in a timely manner.

#45

PAGE 1

Q1: First Name (optional)	Anne
Q2: Last Name (optional)	Ellinger
Q3: Company or Organization - if applicable (optional)	*Respondent skipped this question*
Q8: Which emission source(s) does your comment address	Natural Gas Distribution System Leaks

Q9: Please type your comment below.

I'm so glad there's a campaign and regulations about fixing gas leaks. There's one I smell every time I visit my mom at Sunrise Senior Living (1395 Mass Ave Arlington 02476). Lots of elderly people sit outside that building! It's outrageous that gas companies can let this pollution go unintended.

Now I hear that there are at least 177 Natural Gas leaks in Arlington about 20,000 statewide. Methane is bad for our health, adds to the warming of the planet and could pose a safety hazard -- plus we're paying for the loss.

For all these reasons, we need strict regulations to ensure that the gas companies fix ALL gas leaks. Thank you for your work on this.

Anne

#46

PAGE 1

Q1: **First Name (optional)**	Rebecca
Q2: **Last Name (optional)**	Lane
Q3: **Company or Organization - if applicable (optional)**	*Respondent skipped this question*
Q8: **Which emission source(s) does your comment address**	Natural Gas Distribution System Leaks

Q9: **Please type your comment below.**

I am writing to express my concern about the number of gas leaks that have gone unattended by the utility companies in Massachusetts.

Recently it has come to my attention that there are at least 177 Natural Gas leaks in the town of Arlington alone and approximately 20,000 statewide. There are streets in Arlington where one can actually smell the leaking gas.

The methane from the Natural Gas leaks is bad for our health, bad for the plant life around us, adds to the warming of the planet and could pose a safety hazard. Also, we, the consumers, are the ones paying for lost and unaccounted for gas.

For all these reasons, we need strict regulations to ensure that the gas companies fix all gas leaks. Identifying and fixing the largest leaks (the "super-emitters") should happen as soon as possible, but we also want all other gas leaks fixed in a timely manner.

Many thanks for your leadership on this matter!

#47

PAGE 1

Q1: **First Name (optional)**	Fiona

Q2: Last Name (optional)	*Respondent skipped this question*
Q3: Company or Organization - if applicable (optional)	*Respondent skipped this question*
Q8: Which emission source(s) does your comment address	Natural Gas Distribution System Leaks

Q9: Please type your comment below.

I am writing because I am extremely concerned about the number of gas leaks that have not been repaired by the utility companies in Massachusetts.

Recently it has come to my attention that there are at least 177 Natural Gas leaks in the town of Arlington alone and approximately 20,000 statewide. When I walk my child to school, I can actually smell the leaking gas at certain points on our trip.

The methane from the Natural Gas leaks is bad for our health, bad for the plant life around us, adds to the warming of the planet and could pose a safety hazard. Also, we, the consumers, are the ones paying for lost and unaccounted for gas.

We in Massachusetts need to implement strict regulations to ensure that the gas companies fix all gas leaks. Identifying and fixing the largest leaks should happen as soon as possible, but we also want all other gas leaks fixed in a timely manner.

Our health and the heath of our environment must come first.

Thank you.

#48

PAGE 1

Q1: First Name (optional)	Catherine
Q2: Last Name (optional)	Brewster
Q3: Company or Organization - if applicable (optional)	*Respondent skipped this question*
Q8: Which emission source(s) does your comment address	Natural Gas Distribution System Leaks

Q9: Please type your comment below.

Fixing natural gas leaks surely falls into the category of "no-regrets" climate mitigation. An idea: where the street is dug up to do this work, provide some signage letting people know about the greenhouse action of methane, as well as Mass DEP's overall aims with this regulation.

#49

PAGE 1

Q1: **First Name (optional)**	Jennifer
Q2: **Last Name (optional)**	Davidson
Q3: **Company or Organization - if applicable (optional)**	*Respondent skipped this question*
Q8: **Which emission source(s) does your comment address**	Natural Gas Distribution System Leaks

Q9: **Please type your comment below.**

I am writing to express my concern about the number of gas leaks that have gone unattended by the utility companies in Massachusetts.

Recently it has come to my attention that there are at least 177 Natural Gas leaks in the town of Arlington alone and approximately 20,000 statewide. There are streets in Arlington where one can actually smell the leaking gas.

The methane from the Natural Gas leaks is bad for our health, bad for the plant life around us, adds to the warming of the planet and could pose a safety hazard. Also, we, the consumers, are the ones paying for lost and unaccounted for gas.

For all these reasons, we need strict regulations to ensure that the gas companies fix all gas leaks. Identifying and fixing the largest leaks (the "super-emitters") should happen as soon as possible, but we also want all other gas leaks fixed in a timely manner.

#50

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Q1: **First Name (optional)**	Sheelagh
Q2: **Last Name (optional)**	Stirling
Q3: **Company or Organization - if applicable (optional)**	Mothers Out Front

Q8: Which emission source(s) does your comment address	Natural Gas Distribution System Leaks

Q9: Please type your comment below.

I am writing to express my concern about the number of gas leaks that have gone unattended by the utility companies in Massachusetts.

Recently it has come to my attention that there are at least 177 Natural Gas leaks in the town of Arlington alone and approximately 20,000 statewide. There are streets in Arlington where one can actually smell the leaking gas. It's disturbing to walk down the street in my neighborhood and smell gas leaks in multiple places. The smell actually permeates a few of my neighbor's home. I was told that the gas line on our street is from 1911, so well over a 100 years old. It's time it was replaced.

The methane from the Natural Gas leaks is bad for our health, bad for the plant life around us, adds to the warming of the planet and could pose a safety hazard. Also, we, the consumers, are the ones paying for lost and unaccounted for gas.

For all these reasons, we need strict regulations to ensure that the gas companies fix all gas leaks. Identifying and fixing the largest leaks (the "super-emitters") should happen as soon as possible, but we also want all other gas leaks fixed in a timely manner.

#51

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Q1: First Name (optional)	*Respondent skipped this question*
Q2: Last Name (optional)	*Respondent skipped this question*
Q3: Company or Organization - if applicable (optional)	*Respondent skipped this question*
Q8: Which emission source(s) does your comment address	Natural Gas Distribution System Leaks

Q9: Please type your comment below.

I am writing to express my concern about the number of gas leaks that have gone unattended by the utility companies in Massachusetts.

Recently it has come to my attention that there are at least 177 Natural Gas leaks in the town of Arlington alone and approximately 20,000 statewide. There are streets in Arlington where one can actually smell the leaking gas.

The methane from the Natural Gas leaks is bad for our health, bad for the plant life around us, adds to the warming of the planet and could pose a safety hazard. Also, we, the consumers, are the ones paying for lost and unaccounted for gas.

For all these reasons, we need strict regulations to ensure that the gas companies fix all gas leaks. Identifying and fixing the largest leaks (the "super-emitters") should happen as soon as possible, but we also want all other gas leaks fixed in a timely manner.

#52

PAGE 1

Q1: First Name (optional)	Tyler
Q2: Last Name (optional)	Patrick
Q3: Company or Organization - if applicable (optional)	*Respondent skipped this question*
Q8: Which emission source(s) does your comment address	Natural Gas Distribution System Leaks

Q9: Please type your comment below.

I am writing to express my concern about the number of gas leaks that have gone unattended by the utility companies in Massachusetts.

Recently it has come to my attention that there are at least 177 Natural Gas leaks in the town of Arlington alone and approximately 20,000 statewide. There are streets in Arlington where one can actually smell the leaking gas.

The methane from the Natural Gas leaks is bad for our health, bad for the plant life around us, adds to the warming of the planet and could pose a safety hazard. Also, we, the consumers, are the ones paying for lost and unaccounted for gas.

For all these reasons, we need strict regulations to ensure that the gas companies fix all gas leaks. Identifying and fixing the largest leaks (the "super-emitters") should happen as soon as possible, but we also want all other gas leaks fixed in a timely manner.

#53

PAGE 1

Q1: **First Name (optional)**	Jennifer
Q2: **Last Name (optional)**	*Respondent skipped this question*
Q3: **Company or Organization - if applicable (optional)**	*Respondent skipped this question*
Q8: **Which emission source(s) does your comment address**	Natural Gas Distribution System Leaks

Q9: **Please type your comment below.**

PLEASE fix the leaks in our gas lines! It's absurd that in a world of excess carbon dioxide in our atmosphere and limited fossil fuel resources, we are allowing natural gas to simply escape into the air around us. I am writing to urge you to put increased person-power on this job, and fix these leaks asap.

Thank you for your consideration.

#54

PAGE 1

Q1: **First Name (optional)**	Nili
Q2: **Last Name (optional)**	Pearlmutter
Q3: **Company or Organization - if applicable (optional)**	*Respondent skipped this question*
Q8: **Which emission source(s) does your comment address**	Natural Gas Distribution System Leaks

Q9: Please type your comment below.

I am writing to express my concern about the number of gas leaks that have gone unattended by the utility companies in Massachusetts. In Arlington, where I live, I recently helped to put signs on some of the 177 gas leaks that are known in town and I understand that there are over 20,000 statewide.

The methane from the Natural Gas leaks is bad for our health, bad for the plant life around us, adds to the warming of the planet and could pose a safety hazard. Also, we, the consumers, are the ones paying for lost and unaccounted for gas.

For all these reasons, we need strict regulations to ensure that the gas companies fix all gas leaks. Identifying and fixing the largest leaks (the "super-emitters") should happen as soon as possible, but we also want all other gas leaks fixed in a timely manner.

Thank you,
Nili Pearlmutter

#55

PAGE 1

Q1: First Name (optional)	Jennifer
Q2: Last Name (optional)	Lewis-Forbes
Q3: Company or Organization - if applicable (optional)	*Respondent skipped this question*
Q8: Which emission source(s) does your comment address	Natural Gas Distribution System Leaks

Q9: Please type your comment below.

I am writing to express my concern about the number of gas leaks that have gone unattended by the utility companies in Massachusetts.

Recently it has come to my attention that there are at least 177 Natural Gas leaks in the town of Arlington alone and approximately 20,000 statewide. There are streets in Arlington where one can actually smell the leaking gas.

The methane from the Natural Gas leaks is bad for our health, bad for the plant life around us, adds to the warming of the planet and could pose a safety hazard. Also, we, the consumers, are the ones paying for lost and unaccounted for gas.

For all these reasons, we need strict regulations to ensure that the gas companies fix all gas leaks. Identifying and fixing the largest leaks (the "super-emitters") should happen as soon as possible, but we also want all other gas leaks fixed in a timely manner.

#56

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Q1: **First Name (optional)**	Marcella
Q2: **Last Name (optional)**	Pixley
Q3: **Company or Organization - if applicable (optional)**	*Respondent skipped this question*
Q8: **Which emission source(s) does your comment address**	Building Fuels & Energy Efficiency , Electricity Generation & Distribution , Natural Gas Distribution System Leaks , Sulfur Hexafluoride (SF6) Leaks from the Electric Distribution System

Q9: **Please type your comment below.**

I am writing to express my concern about the number of gas leaks that have gone unattended by the utility companies in Massachusetts.

Recently it has come to my attention that there are at least 177 Natural Gas leaks in the town of Arlington alone and approximately 20,000 statewide. There are streets in Arlington where one can actually smell the leaking gas.

The methane from the Natural Gas leaks is bad for our health, bad for the plant life around us, adds to the warming of the planet and could pose a safety hazard. Also, we, the consumers, are the ones paying for lost and unaccounted for gas.

For all these reasons, we need strict regulations to ensure that the gas companies fix all gas leaks. Identifying and fixing the largest leaks (the "super-emitters") should happen as soon as possible, but we also want all other gas leaks fixed in a timely manner.

#57

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Q1: **First Name (optional)**	Elizabeth
Q2: **Last Name (optional)**	Rodio
Q3: **Company or Organization - if applicable (optional)**	*Respondent skipped this question*
Q8: **Which emission source(s) does your comment address**	Natural Gas Distribution System Leaks

Q9: **Please type your comment below.**

Thank you to DEP for proposing regulations on methane emissions and for extending regulations beyond 2030.
While this proposal is welcome, there are problems with the methodology for determining emissions that
The DEP's proposal is likely to discount "superemitter" leaks and likely underestimates total methane emissions.
The DEP should require verifiable, empirical measurements - a mix of "bottom-up" and "top-down" monitoring to ensure real emissions reductions.
The DEP should also consider regulations on gas venting, storage and other sources of fugitive methane emissions.

#58

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Q1: **First Name (optional)**	Chandreyee
Q2: **Last Name (optional)**	Das
Q3: **Company or Organization - if applicable (optional)**	Mothers Out Front
Q8: **Which emission source(s) does your comment address**	Natural Gas Distribution System Leaks

Q9: **Please type your comment below.**

I am concerned about the number of gas leaks that have gone unattended by the utility companies in Massachusetts.

As you are probably aware, there are at least 177 Natural Gas leaks in the town of Arlington alone and approximately 20,000 statewide. There are streets in Arlington where one can actually smell the leaking gas -- one of these is Pine Street, where my children walk and are assaulted by the smell.

The methane from the Natural Gas leaks is bad for our health, bad for the plant life around us, adds to the warming of the planet and could pose a safety hazard. Also, we, the consumers, are the ones paying for lost and unaccounted for gas.

We need stricter regulations to ensure that the gas companies fix all gas leaks. Not only should the "super-emitter" leaks be fixed as soon as possible, but we also want all other gas leaks fixed in a timely manner.

Thank you for your attention.

#59

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Q1: First Name (optional)	Jessica
Q2: Last Name (optional)	Kuznick
Q3: Company or Organization - if applicable (optional)	*Respondent skipped this question*
Q8: Which emission source(s) does your comment address	Natural Gas Distribution System Leaks

Q9: Please type your comment below.

Dear MassDEP,

I am writing because I have recently noticed a great many signs in my neighborhood marking gas leaks that have gone unattended by the utility companies in Massachusetts. Several are in the areas where my children play.

I was curious to know more, and learned from friends on the Sustainable Arlington committee that there are at least 177 Natural Gas leaks in the town of Arlington alone and approximately 20,000 statewide. There are streets in Arlington where one can actually smell the leaking gas.

The methane from the Natural Gas leaks is bad for our health, bad for the plant life around us, adds to the warming of the planet and could pose a safety hazard. Also, we, the consumers, are the ones paying for lost and unaccounted for gas.

For all these reasons, we need strict regulations to ensure that the gas companies fix all gas leaks. Identifying and fixing the largest leaks (the "super-emitters") should happen as soon as possible, but we also want all other gas leaks fixed in a timely manner.

Please let me know what your plans are for addressing this problem.

Sincerely,
Jessica Adler Kuznick
41 Lewis Avenue
Arlington, MA 02474

#60

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Q1: First Name (optional)	*Respondent skipped this question*
Q2: Last Name (optional)	*Respondent skipped this question*
Q3: Company or Organization - if applicable (optional)	*Respondent skipped this question*
Q8: **Which emission source(s) does your comment address**	Other (please specify) Methane leaks

Q9: **Please type your comment below.**

My grandchildren will suffer if nothing is done about the Methane leaks in Arlington, MA. Please look into this matter. Just putting up notifications is meaningless if nothing is done to correct the problem! Thank you.

#61

PAGE 1

Q1: **First Name (optional)**	Julie
Q2: **Last Name (optional)**	Lucey
Q3: Company or Organization - if applicable (optional)	*Respondent skipped this question*
Q8: **Which emission source(s) does your comment address**	Natural Gas Distribution System Leaks

Q9: **Please type your comment below.**

I am writing to express my concern about the number of gas leaks that have gone unattended by the utility companies in Massachusetts.

Recently it has come to my attention that there are at least 177 Natural Gas leaks in the town of Arlington alone and approximately 20,000 statewide. There are streets in Arlington where one can actually smell the leaking gas.

The methane from the Natural Gas leaks is bad for our health, bad for the plant life around us, adds to the warming of the planet and could pose a safety hazard. Also, we, the consumers, are the ones paying for lost and unaccounted for gas.

For all these reasons, we need strict regulations to ensure that the gas companies fix all gas leaks. Identifying and fixing the largest leaks (the "super-emitters") should happen as soon as possible, but we also want all other gas leaks fixed in a timely manner.

#62

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Q1: **First Name (optional)**	Paul
Q2: **Last Name (optional)**	Green
Q3: **Company or Organization - if applicable (optional)**	*Respondent skipped this question*
Q8: **Which emission source(s) does your comment address**	Natural Gas Distribution System Leaks

Q9: **Please type your comment below.**

There are far too many natural gas leaks across the state. Where I live in Arlington there are at least 177. These leaks are adding to climate change, are generally unhealthy, potentially dangerous, and clearly a waste of energy. Here is a nice jobs program – let's fix them! Thank you, Paul

#63

PAGE 1

Q1: **First Name (optional)**	Jodi
Q2: **Last Name (optional)**	Auerbach
Q3: **Company or Organization - if applicable (optional)**	*Respondent skipped this question*
Q8: **Which emission source(s) does your comment address**	Natural Gas Distribution System Leaks

Q9: Please type your comment below.

I am writing to express my concern about the number of gas leaks that have gone unattended by the utility companies in Massachusetts.

Recently it has come to my attention that there are at least 177 Natural Gas leaks in the town of Arlington alone and approximately 20,000 statewide. There are streets in Arlington where one can actually smell the leaking gas.

The methane from the Natural Gas leaks is bad for our health, bad for the plant life around us, adds to the warming of the planet and could pose a safety hazard. Also, we, the consumers, are the ones paying for lost and unaccounted for gas.

For all these reasons, we need strict regulations to ensure that the gas companies fix all gas leaks. Identifying and fixing the largest leaks (the "super-emitters") should happen as soon as possible, but we also want all other gas leaks fixed in a timely manner.

Thank you for your prompt attention to this matter.

Jodi Auerbach

#64

PAGE 1

Q1: First Name (optional)	Paul
Q2: Last Name (optional)	Benzaquin
Q3: Company or Organization - if applicable (optional)	*Respondent skipped this question*
Q8: Which emission source(s) does your comment address	Other (please specify) All

Q9: Please type your comment below.

With the election of Donald Trump, and a Republican House and Senate, who deny the evidence of hard science, and the very real effect of man made Climate Change, it is urgent for Massachusetts to set an example of how educated and concerned citizens make policy to safeguard the environment, both for human welfare and for the preservation of a robust and healthy environment.

#65

PAGE 1

Q1: **First Name (optional)**	Ann
Q2: **Last Name (optional)**	Rosenkranz
Q3: **Company or Organization - if applicable (optional)**	*Respondent skipped this question*
Q8: **Which emission source(s) does your comment address**	Other (please specify) Nuclear energy

Q9: **Please type your comment below.**

I applaud the CES as Massachusetts' plan to reduce greenhouse gas emissions as required by the Massachusetts Global Warming Solutions Act. Unfortunately, the CES lists "next generation nuclear power" as one method of complying with this mandate. Next generation nuclear plants should not be considered a source of clean energy. The mining, processing and transport of nuclear fuel for the reactor all contribute to greenhouse gas emissions, and the 500 million gallons of heated water Pilgrim dumps into Cape Cod bay every day contributes to the warming of the ocean. Massachusetts can meet its carbon reduction goals without including nuclear power plants. Nuclear power should not be eligible for inclusion in a renewable energy portfolio standard. Including nuclear in the CES would not reduce regional emissions, and would increase customers' utility bills!

Additionally and specifically the Pilgrim Nuclear Power Station in Plymouth... an aging, outdated, failing plant, 3 years older than its expected lifetime and continuously downgraded by the NRC, now into the 4th cornerstone with 2 other most problematic plants in the US and one step away from mandated shutdown... should absolutely not be allowed to continue operation because it is considered a source of "clean energy".

Thank you for considering these important, proven points when deliberating whether to include nuclear power, be it next generation or currently operating plants, as clean energy.

#66

PAGE 1

Q1: **First Name (optional)**	Brian

Q2: Last Name (optional)	O'Malley, MD
Q3: Company or Organization - if applicable (optional)	Provincetown Delegate, Barnstable County Assembly
Q8: Which emission source(s) does your comment address	Electricity Generation & Distribution , Other (please specify) Renewable Energy Portfolio

Q9: Please type your comment below.

I would strongly urge reconsideration of nuclear power as a clean energy source within the renewable energy portfolio standard. It does not fit. And until "next generation nuclear" is defined with specifics, I include it with these concerns.

Only the most narrow of definitions of clean/green/renewable could ever include the entire nuclear cycle of mining, enriching, transportation, use and long-term storage of these supremely toxic materials.

And of course, the daily discharge of many millions of gallons of heated water is accelerating a global trend. As a scientist who has monitored Provincetown Harbor water temperatures for many years, a notable warming trend in recent years is unmistakable.

The many costs, the carbon footprint, and the forever-risks of yet-unresolved storage needs make nuclear a very poor choice from nearly all environmental perspectives.

I call for a larger perspective than the narrow language of regulatory law. Please keep the larger picture in mind. Nuclear power is not clean, and is not renewable.

#67

PAGE 1

Q1: First Name (optional)	James
Q2: Last Name (optional)	Dufresne
Q3: Company or Organization - if applicable (optional)	350 MA South Coast
Q8: Which emission source(s) does your comment address	Electricity Generation & Distribution , Natural Gas Distribution System Leaks , Transportation, Land Use & Smart Growth

Q9: Please type your comment below.

Good afternoon, first I would like to say that public hearings on this should be held statewide, not limited to Boston and Worcester.

1. In regards to electric generation & distribution in relation to the GWSA and basic economics, the state should immediately abandon any more natural gas infrastructure investments and instead remove net metering caps and invest in energy storage. Why would we invest in last century technology and importing greenhouse gas emiting fossil fuels when we could invest in distributed solar, a smart grid and energy storage. Natural gas infrastructure has a 50+ life expectancy, that's not a bridge fuel plan but a foolish investment in soon to be stranded assets!

2. Develop a plan to fix all gas leaks on the distribution side, it cost the environment and customers billed for gas that leaks!

3. Support and Promote Commuter Rail -
Specifically South Coast Rail via the Stoughton route removing up to 5000 vehicles from the road. Extend commuter rail from Worcester to Springfield and open daily service to Cape Cod. Again these decisions are not only beneficial to the environment with greenhouse gas reductions but a boost to the economy especially in gateway cities of Fall River, Taunton, New Bedford and Springfield!

Please extend these hearings statewide to generate more comments!

#68

PAGE 1

Q1: First Name (optional)	richard
Q2: Last Name (optional)	toole
Q3: Company or Organization - if applicable (optional)	Cape Light Compact, Martha's Vineyard Commission
Q8: Which emission source(s) does your comment address	Building Fuels & Energy Efficiency , Electricity Generation & Distribution , Natural Gas Distribution System Leaks , Transportation, Land Use & Smart Growth

Q9: Please type your comment below.

Please insure that our energy future is based on clean, renewable energy sources and that our electrical grid is upgraded in a way to allow flexibility and durability. Living on an Island facing a future of more frequent and severe storms and increasing sea levels, my community will be especially vulnerable. Also with no where to safely evacuate to if there is ever a serious incident at the Pilgrim Nuclear power plant please, please, please insure that that plant is shut down and safely decommissioned as soon as possible and do not allow any future nuclear plants to be built.
The prospect of clean, reliable energy from wind farms off our coast gives me hope that an exit plan from dirty and dangerous electricity generation exists and should be supported and encouraged immediately. Thank you. Richard Toole

#69

PAGE 1

Q1: **First Name (optional)**	Claire
Q2: **Last Name (optional)**	Miller
Q3: **Company or Organization - if applicable (optional)**	Toxics Action Center
Q8: **Which emission source(s) does your comment address**	Natural Gas Distribution System Leaks

Q9: **Please type your comment below.**

Thank you to DEP for proposing regulations on methane emissions and for extending regulations beyond 2030. While this proposal is welcome, there are problems with the methodology for determining emissions. The DEP's proposal is likely to discount "superemitter" leaks and likely underestimates total methane emissions. The DEP should require verifiable, empirical measurements - a mix of "bottom-up" and "top-down" monitoring to ensure real emissions reductions. The DEP should also consider regulations on gas venting, storage and other sources of fugitive methane emissions.

#70

PAGE 1

Q1: **First Name (optional)**	Victoria
Q2: **Last Name (optional)**	Bok
Q3: **Company or Organization - if applicable (optional)**	Mothers Out Front
Q8: **Which emission source(s) does your comment address**	Natural Gas Distribution System Leaks

Q9: Please type your comment below.

I am a mother of two teenage boys, a long-time Boston resident, and an active volunteer with the non-profit group Mothers Out Front (MOF), whose goal is to successfully press decision-makers such as yourselves to shift quickly and decisively away from fossil fuels to clean and renewable energy. We have worked hard over the past year to highlight the issue of gas leaks and their very real contribution to climate change. Thus, I am dismayed by your suggested approach to capping and reducing gas leak emissions under Governor Baker's Executive Order 569, which pooh-poohs the problem and offers what seems to me to be a non-solution, one that would not accelerate leak repair. Your approach appears to depend on a series of assumptions that seem flawed, most particularly "emissions factors" based on national samples, not local ones that we can trust accurately reflect our ancient infrastructure and include the "super-emitters" that have been shown to be responsible for more than half the leaked methane. It seems you would simply multiply numbers of miles of pipe of different material by these emissions factors to get an estimate of how much leaking methane we have here in Massachusetts. The utilities could show decreasing annual leakage simply by replacing a portion of the pipes each year as they now do. And yet, without any empirical data about actual numbers of leaks, actual leak volume, and/or actual methane in the air here in Massachusetts, your numbers could be off by miles. Why do we worry about this? Well, the utilities' data has consistently been off compared to other studies by Boston University and Harvard University scientists and others (who have submitted comments to you), understating the number of leaks and the volume of gas leaked by a great deal. Without a more empirically-based and transparent approach to this problem than the one you suggest, we are concerned that the problem will simply be brushed aside as it has been in the past. We were excited to see that gas leaks were included in Governor Baker's executive order. What a huge disappointment if this turns out to be meaningless, with the utilities simply continuing on their slow and steady course of pipe replacement despite the urgent need to move more quickly in the face of escalating planetary climate challenges.

#71

PAGE 1

Q1: First Name (optional)	deborah
Q2: Last Name (optional)	peterson
Q3: Company or Organization - if applicable (optional)	*Respondent skipped this question*
Q8: Which emission source(s) does your comment address	Electricity Generation & Distribution

Q9: Please type your comment below.

NEXT GENERATION NUCLEAR POWER is an environmental hazard and should not be included among the options. The green house gases from mining, processing, transporting, and storage as well as the heated water should all be included in the environmental impacts of this source of energy.

#72

PAGE 1

Q1: **First Name (optional)**	Cathy
Q2: **Last Name (optional)**	Kristofferson
Q3: **Company or Organization - if applicable (optional)**	*Respondent skipped this question*
Q8: **Which emission source(s) does your comment address**	Building Fuels & Energy Efficiency , Electricity Generation & Distribution , Natural Gas Distribution System Leaks , Transportation, Land Use & Smart Growth

Q9: Please type your comment below.

Comments for the Department of Environmental Protection regarding Reducing GHG Emissions under Section 3(d) of the Global Warming Solutions Act (GWSA) - Executive Order 569

While the Executive Order that brought about this process is a start, it's not enough. As we all know we are already not on track to meet the 2020 reductions as mandated. We've seen, as reported by the Boston Globe, emissions from power plants increased last year for the first time in five years. And as your stakeholder meeting presentation showed the data is three year old. We don't know if the increase from those plants has risen even more three years on. It's great that Governor Baker is reaffirming climate chaos is a big threat, recently tweeting about increasing resiliency of infrastructure, but we need as much attention – actually more - on avoidance of further damage to the environment by fossil fuels. I attended the legislative briefing that followed the Supreme Judicial Court's Kain decision. There I heard CLF respond that they would be forced to bring the Commonwealth back to court if it failed to achieve compliance to the 2020 25% requirement. Let's avoid that too.

One of my biggest concerns that will lead us to failure is the continued embrace of natural gas by the Baker Administration. Despite the SJC striking down his DOER/DPU scheme of electric ratepayer funding of new gas infrastructure, we continue to hear how much large overbuild of infrastructure, like Spectra's Access Northeast, is favorable to this administration. I've lost count of the times Secretary Beaton has testified or remarked that without new large fracked gas pipelines to supply new gas power plants we will be facing "rolling blackouts." I'm sure you are aware the Attorney General's report showed we don't need more pipelines for electric reliability. Those new large pipelines are designed to exist for 50-80 years - the Commonwealth should have a better vision for the future than that. I read a while back that at another one of those 6 New England governor conferences Governor Baker suggested switching vehicles from gasoline to natural gas as a solution to emissions reductions. I don't believe we need to dream up more and increased ways to consume natural gas but rather get on the bus to the rapid decline of its use.

Also, of concern for me with the continued, and proposed increased, use of natural gas is the emissions, fugitive and planned, in the transportation system, not just the distribution system. My concern is not just the methane that escapes from old leaking infrastructure but all the raw methane that is blown off at compressor stations, metering stations, mainline valves, and other bits of infrastructure where methane releases are a matter of standard operating procedure.

I imagine your response will be you can't regulate interstate pipeline infrastructure but there must be something the administration can do to protect our Commonwealth's clean air and water.

The Senate version of the omnibus energy bill last session gave us all great hope for a clean future. But, all those hopes were quickly dashed with the final stripped down legislation that was signed. And what made it through into law impacts too far into the future to meet our immediate needs. 2020 is a mere 4 years away. We need action now.

We need more than low hanging fruit on energy efficiency. It is, after all, our "first fuel." At the Worcester stakeholder meeting I heard the mandatory announcement of Massachusetts being #1 for the 5th year in a row, and more than once, but no mention that in reality we have lost our solitary spot atop that chart now that we are actually tied with California. That means under the Baker Administration someone else has caught us. We should work hard to keep them from overtaking us – not just because we are better, but because we need the reduction of energy consumption to reduce emissions.

I look forward to your regulations that will help us not simply meet, but exceed, the 2020 25% reduction. I trust they will also put us on the path we need to meet the 2050 goals.

Thank you.

Cathy Kristofferson
Ashby, MA 01431

#73

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Q1: **First Name (optional)**	DeAnne
Q2: **Last Name (optional)**	Dupont
Q3: **Company or Organization - if applicable (optional)**	*Respondent skipped this question*
Q8: **Which emission source(s) does your comment address**	Natural Gas Distribution System Leaks

Q9: **Please type your comment below.**

I am very concerned about the number of gas leaks that have gone unattended by the utility companies in Massachusetts and more specifically in the Town of Arlington.

Recently I helped to tag gas leaks in Arlington where there are at least 177 leaks. As I was tagging, one woman came out of her house stating she was so glad I was doing this. She has reported gas leaks in front of her house and she stated " look at my front yard I can not get anything to grow because of the gas emitted." If the grass and plants die from the emitted gas what is it doing to people especially to children.

The methane from natural gas leaks is bad for our health, vegetation and adds to the warming of the planet. Also we consumers pay for the gas that goes up in the air and used by no one.

We need strict regulations to ensure that the gas companies repair ALL gas leaks. Identifying and fixing the largest leaks should happen immediately, but all gas leaks should be repaired. Citizens can save money by not having to pay for the gas that just goes up into the air and benefiting no one and actually causing harm to your children and to my children.

#74

PAGE 1

Q1: **First Name (optional)**	Kathy
Q2: **Last Name (optional)**	Farrell

Q3: Company or Organization - if applicable (optional)	*Respondent skipped this question*
Q8: Which emission source(s) does your comment address	Building Fuels & Energy Efficiency , Electricity Generation & Distribution , Natural Gas Distribution System Leaks

Q9: Please type your comment below.

Executive Order 569 is a positive step towards achieving our GWSA targets. More can be done to achieve these targets, such as taking a state position, as did Connecticut, that Massachusetts is not interested in additional fossil fuel infrastructure because it is not in our residents' best interests. The need to plug our natural gas pipeline leaks is screamingly obvious for many reasons, including the new awareness of how dangerous methane leaks are to fostering climate change. Our energy approach requires long term thinking. For example, what about implementing a carbon pricing system in the state? Massachusetts is making advances in solar, wind and hydro use but some of these advances will not be ready by 2020, so we need other tactics to help us reach our GWSA goals. The state's energy saving program is phenomenal, but needs stronger, louder communication so that residents can better understand and utilize its many facets.

Thank you for your diligence in advancing CLEAN energy and therefore protecting/helping the Commonwealth's residents.

#75

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Q1: First Name (optional)	F William
Q2: Last Name (optional)	Green
Q3: Company or Organization - if applicable (optional)	*Respondent skipped this question*
Q8: Which emission source(s) does your comment address	Building Fuels & Energy Efficiency , Electricity Generation & Distribution , Natural Gas Distribution System Leaks , Transportation, Land Use & Smart Growth

Q9: Please type your comment below.

Comments on Department of Environmental Protection plans for achieving mandated reductions in greenhouse gas emissions by 2012 and beyond

F William Green, Cambridge; ynotbgreen@comcast.net

An undated Executive Office of Energy and Environmental Affairs (EEA) web page titled “Massachusetts’s Progress

towards Reducing Greenhouse Gas (GHG) Emissions by 2020" at first appears to indicate that the state is on a remarkable and timely course toward achieving its GHG reductions goal. This information suggests that it may not be that difficult to accomplish the last bit of greenhouse gas reduction to meet the 2020 mandated goal of 25% and we have four more years to do it. The sun-dial graphic [figure 1] indicates that in achieving a reduction to 72mmtCO2e in 2012 the Commonwealth has already decreased its GHG by 24% from the 1990 baseline figure of 94 mmtCO2e and thus might only have a percent or two more to reach the mandated target. There are several important reasons to doubt the likelihood of achieving this 2020 mark with any sort of ease or lack of vigor.

Figure 1

First of all, the GHG reported for 2013 has gone up to 75.8mmtCO2e, a five percent increase; and we have no published data for 2014 and 2015 to help in determining the currently developing trajectory. Somewhat more to the point, probably, is the likelihood that certain one-time low-hanging fruit have been harvested and that such remarkable progress as seen in those years between 2008 and 2012 cannot continue, and indeed, may well have already ceased. One must be careful not to under-estimate additional likely explanations for much of the Commonwealth's impressive reductions from 2008 to the last reporting date of 2013.
From 2008 to 2012, there were coincidental factors that clearly have bent the curve in such a fortuitous direction suggesting, falsely, that we are definitely on track to meet the 2020 goal. Several of these coincidences are "one-offs" and may not be replicable and may not endure:

• The Great Recession: Beginning in late 2007 the economic condition of the country seriously deteriorated. U.S. gross domestic product contracted by 5%. Unemployment doubled. Household assets decreased by at least one third. The recession had the effect of reducing energy use throughout the economy including in the transportation sector (approximately 40% of the state's GHG) with the result of considerably lower than projected greenhouse gas emissions. For example, in 2008 the previously steadily rising curve in miles/year travelled by car dropped by an estimated 70 to 80 billion miles or 3.7% and flattened out through 2012 (precisely the time frame corresponding to the EEA's report of GHG reductions credited in the "Massachusetts' Progress towards Reducing Greenhouse (GHG) Emissions by 2020"). [figure 2] Not only were 70 to 80 billion travel-miles avoided in that first year of the great recession, subsequent years of decreased vehicle miles travelled resulted in several hundred billion additional vehicle miles avoided and their resultant GHGs.

Figure 2

• Increase in fuel economy standards: In 2009 with the US automobile industry on its heels, President Obama worked out a deal with the near-bankrupt car companies that would raise the light vehicle standard to 54.5 mpg by 2025. [figure 3] With this expectation the NHTSA, EPA and the auto industry began accelerating the move toward higher levels of fuel efficiency, and in fact, achieved levels beyond those expected. The prospect of rather sudden, dramatic changes in California and national CAFE standards significantly moved the needle on fuel efficiency and on the reduction of GHG emissions in Massachusetts and throughout the country.

Figure 3: Fuel economy standard for passenger vehicles from MY1978-2025.
Since 1975, a number of changes have been made to the standards. Figure 3 provides an annotated history of the U.S. CAFE standards. A number of other countries have also instituted fuel economy standards, with most establishing more aggressive targets than the United States. See here for more details.

Source: NHTSA Summary of Fuel Economy Performance, NHTSA MY2017-2025 Factsheet
1. 1978-1985: Congress sets car standard (1978-1985)
2. DOT sets truck standard to max feasible (1979-1996)
3. DOT decreased car standard (1986-1989)
4. DOT sets car standard to 27.5 mpg (1990-2010)
5. Congress freezes truck standards at 20.7 mpg (1997-2001) 6. Bush Admin issues new truck targets (2005-2007)
7. EISA changes CAFE to footprint standard (2008-present)
8. Obama Admin issues new car & truck standards (2012-2016)
9. Obama Admin issues new car & truck standards (2017-2025)

• The progressive traction of the Regional Greenhouse Gas Initiative (RGGI): With the prospect of RGGI coming on the scene there was a noteworthy decrease in GHG beginning in the 2007 to 2008 period. [figure 4] While there is every

expectation for RGGI to progressively ratchet down GHG emissions in its member states, there appeared to be a rather marked reduction related to contraction of the cap in 2008. The prospect for RGGI caps coming into effect in 2009 may have stimulated an anticipatory one-time drop in GHG or the dip may have been related to the great recession, as noted above.

Figure 4

Recognized as first in the nation by the American Council for Energy Efficiency Economy, now, three years straight the Commonwealth appears to be out in front again on issues relating to climate change and the necessity of markedly reducing greenhouse gas. The Department of Environmental Protection and the Executive Office of Energy and Environmental Affairs and legislature deserve due credit for that. My sense, however, is that a considerable proportion of the reduction in GHG may well be explained by external factors such as the great recession, the emerging rigor in light vehicle fuel economy standards and the increased traction of RGGI, not just by executive and legislative prescriptions. Plans for achieving full compliance with the Global Warming Solutions Act by 2020 will likely need adjusting to compensate for the fortuitous near 24% decrement in GHG reported in the 2012 figure of 72 mmTCO2e. The DEP and EEA must prepare for the eventuality of a significant shortfall in their predicted reduction in GHG mmTCO2e as numbers come out for 2013 and later years. Beyond that, once the low-hanging fruit have all been picked, the rigor of moving to the GWSA 80% reduction in GHG will become exceptionally daunting and must be anticipated. How will we get there from here?

Recommendations for DEP and EEA:

1. Adopt the mindset that climate change is a huge and urgent threat and that the DEP and EEA are IN CHARGE in leading the effort to limit its impact
2. Make protecting the environment the supreme issue, not the bureaucracy or the integrity of a law
3. Aggressively work to find an extra 5%-10% reduction in GHG in evolving plans for meeting 2020 goal (this as a cushion if GHG reduction numbers are falling short of predictions)
4. Increase budget and young hires for the Department of Environmental Protection and EEA
5. Check that the profile of state vehicles is appropriately fuel efficient (“leading by example”)
6. Consider modifying temperature settings in state buildings, to save energy (lead by example)
7. Reinstate 55 mph speed limits to increase fuel efficiency (as was done in 1970s)
8. Enforce there being no new fossil fuel pipelines, gas plants, or compressor stations in Massachusetts. If the goal is to decrease GHG and if the burning of fossil fuels is the main driver of anthropogenic climate change, we must not encourage importing and using more such fuels by building more pipelines.
9. Set 2018 as the date by which the GHG reduction figure will be proposed for 2030
10. Be on time with GHG reduction reports; the 2013 report is not out, nor is the one for 2014
11. Declare/encourage carbon pricing as a rational, efficient

Figures 1-4 will be sent as attachment in as much as they would not paste into your response page.

#76

PAGE 1

Q1: First Name (optional)	Launa
Q2: Last Name (optional)	Zimmaro
Q3: Company or Organization - if applicable (optional)	*Respondent skipped this question*

Q8: Which emission source(s) does your comment address	Natural Gas Distribution System Leaks , Transportation, Land Use & Smart Growth

Q9: Please type your comment below.

Thank you for the opportunity to comment on proposed regulations related to reducing GHG emissions through section 3d of the GWSA.

Regarding gas leaks, I am writing to urge the MassDEP to require the strictest regulations to cap methane leaks from existing gas pipelines, beginning with those leaks identified as 'super emitters' (currrently 7% of leaks account for 50% of leaked gas), but including every level of methane gas leaks, through a sustained program. There should be zero emissions from leaky, existing gas pipelines. Let's fix what is truly broken as our starting point.

My next comment regards the role of the MassDOT in the monumental challenge of reducing emissions. Transportation is the largest source of GHG emissions in the Commonwealth. I've heard that the MassDOT is planning on construction of a 5200 car parking lot. How does such a plan relate to efforts to reduce emissions? In order to truly succeed in the vital effort to reduce GHG emissions, various departments of our government need to work together on an integrated approach, with each accountable for progress in achieving the shared goal of the mandate. Integrating efforts across departments applies to all departments, but is particularly pertinent in terms of the Department of Transportation, given the role of transportation emissions in Mass.

We just "can't get there from here" if we continue working in departmental and agency silos, particularly with the rate of climate change impacts accelerating, rapidly closing the window of opportunity to take meaninful action. We are Massachusetts with all that represents in terms of brain power, talent, spirit of innovation and shear gumption. can do better than this.

#77

PAGE 1

Q1: First Name (optional)	Mark
Q2: Last Name (optional)	Kresowik
Q3: Company or Organization - if applicable (optional)	Sierra Club
Q8: Which emission source(s) does your comment address	Building Fuels & Energy Efficiency , Electricity Generation & Distribution , Natural Gas Distribution System Leaks , Transportation, Land Use & Smart Growth

Q9: Please type your comment below.

On behalf of the Sierra Club and its more than 60,000 members and supporters in Massachusetts, thank you for the opportunity to comment on the Department of Environmental Protection's ("DEP") implementation of Governor Baker's Executive Order 569, "Establishing an Integrated Climate Change Strategy for the Commonwealth" ("Executive Order"). (1)

I. Introduction

We appreciate Governor Baker's leadership in fulfilling the requirements of the Global Warming Solutions Act ("GWSA"). The Executive Order, the administration's recent statements supporting curbing carbon pollution from plants by 5% annually from 2020 levels through 2030 through the Regional Greenhouse Gas Initiative ("RGGI"), (2) and Massachusetts' joint announcement of plans to contract with approximately 460 MW of new wind and solar projects (3) underscores the Commonwealth's commitment to aggressively address climate pollution from all sectors simultaneously in order to meet both Massachusetts' short- and long-term climate goals. As the Clean Energy and Climate Plan ("CECP") notes (4), there is synergy and resulting benefits from working across sectors, with decarbonization of the electric sector dramatically amplifying the benefits of cleaning up transportation and heating and cooling through strategic electrification.

The Sierra Club, in collaboration with Pace Energy and Climate Center and Chesapeake Climate Action Network, retained Synapse Energy Economics to develop a vision for the most cost-effective means to meet the 2030 climate goals of the states that participate in RGGI, including Massachusetts. Specifically, our organizations tasked Synapse with building out a reference case business-as-usual scenario and then identifying the lowest cost shifts from that reference case that are both achievable within the relevant time frame and necessary to meet a 40% economy-wide reduction in greenhouse gas emissions from 1990 levels by 2030, and to model the resultant economic and climate impacts.

Synapse concluded that the electric sector must be responsible for and tasked with nearly half of the incremental emission reductions between now and 2030, including acceleration of energy efficiency, powering an additional 10 million electric vehicles, and a significant increase in heat pumps for heating and cooling buildings. (5) Such a cost effective trajectory matches the CECP's conclusion: "the only viable path to deep reductions in GHG emissions is through a combination of reduced energy consumption (through increased energy efficiency in vehicles and buildings), expanded availability of clean electricity, and electrification of the transportation and heating sectors… The scope of the challenge can be summarized in three words: reduce, electrify, and decarbonize."

Significantly, The RGGI Opportunity 2.0 also shows that complying with climate goals in a least-cost manner is a win-win for the region. Not only do the pollution reductions mitigate risks to human health, but cost effective deployment of energy saving technologies, wind and solar power, electric vehicles, and heat pumps promotes economic growth and jobs. As a result of these investments the RGGI member states, including Massachusetts, would achieve $25.7 billion in total savings while adding an average of 58,400 job-years per year over and above the $11 billion contribution to the state's gross product that the clean-energy sector already contributes (6). Massachusetts would see carbon emissions from natural gas, buildings, and transportation decline while adding tens of thousands of jobs, building on the nearly 20,000 good-paying jobs added to Massachusetts alone since 2010.

While the Sierra Club recognizes that all of the recommendations here are not solely for regulations that DEP can immediately implement, we hope that these suggestions will assist the administration in both its short-term and long-term vision for achieving the Commonwealth's climate goals.

II. Comments

A. Clean Electricity

1. The Sierra Club supports DEP's proposed limits on Electricity Generating Facilities (7), but the trajectory must be faster

Per the aforementioned analysis by Synapse Energy Economics, carbon pollution from the electric sector in the Northeast must decline by 5% annually from 2020 levels through 2030 to stay on track to reach the Commonwealth's climate commitments. Faster and deeper reductions in the electric sector are necessary due to the electrification of the rest of the economy, as acknowledged in the CECP. This is consistent with analysis performed for the Connecticut Governor's Council on Climate Change, which demonstrated that hitting that state's comparable 80% by 2050 goal requires nearly 100% carbon-free electricity by 2050 (8). The trajectory proposed by DEP would decline by 2.5% annually from 2018 levels, but would still fall well short of what appears to be necessary. The Sierra Club thus urges the 5% annual reduction mentioned by the Synapse Energy study.

DEP has also requested comment on how to treat new facilities, proposing to set a cap of 1 million tons that declines 2.5% annually from each previous year. We are concerned that the proposal creates an incentive to inflate carbon pollution during the first three years of operation for such new plants, and we question how the proposed cap would

apply to planned facilities like the Footprint and West Medway natural gas units: would the limits proposed in the air permit for that plant fall within the proposed cap for new facilities? Assuming so, it would appear that no new units can be built in the Commonwealth without the capability of capturing and storing climate-disrupting pollution such as carbon dioxide and methane. Thus we encourage DEP to first require that any proposed electric generating facilities emitting such pollutants to have the capability of capturing and safely disposing of that pollution. Finally, the trajectory for new plants appears to decline at a slower rate – 2.5% from each previous year as opposed to 2.5% from the fixed 2018 level – so we again reiterate the need for a more rapid pollution decline in order to reach the Commonwealth's goals and urge parity for both existing and new sources.

2. Massachusetts must accelerate the rate of increase of clean, renewable energy for all Commonwealth ratepayers

The Sierra Club similarly recognizes the need for more clean energy, as embodied in the Clean Energy Standard proposal (9). However, consistent with our comments on the 2014 proposal (10), we believe that the technologies eligible for Class I of the Renewable Portfolio Standard (RPS) continue to have the most benefits for the Commonwealth. Working with the legislature to accelerate the RPS ensures that Massachusetts can take credit for carbon pollution reductions from wind and solar projects built in the region. Contracting with additional resources without correspondingly increasing the RPS functionally delivers the benefits of those projects to other states while Massachusetts customers bear the costs (11). Applying the Commonwealth's energy efficiency and renewable energy requirements to all Massachusetts customers by including municipal utilities can also deliver an estimated 0.6 million tons of additional carbon pollution reductions by 2020 (12).

In August, the New York Public Service Commission finalized a Clean Energy Standard that requires 50 percent of all electricity used in New York State by 2030 to be from renewable energy sources (13). Rhode Island and the District of Columbia also approved substantial extensions and increases to existing renewable portfolio standards, as did the Maryland legislature. In the near term, we encourage Massachusetts to follow its peers in the region by increasing the RPS rate of growth to at least a 2% annual increase through 2020 and beyond. Over the longer term it is clear that the RPS must accelerate even faster, beyond 2% annually to 3% or 4% as soon as practicable, and the Commonwealth can demonstrate leadership by going even further.

3. To achieve the GWSA 2020 Requirements, Massachusetts should execute new contracts for wind and solar projects as quickly as possible

The Sierra Club applauds Massachusetts' recent announcement with Connecticut and Rhode Island of plans to contract for approximately 460 MW of wind and solar projects to serve the Southern New England market. Contracting for additional wind and solar projects in the region as quickly as possible, pursuant to the authority in House Bill 4568 (14), can help ensure that projects are completed in the time required to contribute to the 2020 GWSA goal. With the federal production and investment tax credits set to phase down and ultimately expire, helping developers complete additional wind and solar projects within the state and region through long term contracts will also provide significant cost savings and maximum benefit to all Massachusetts residents. Increasing deployment of these resources will boost the regional economy with new jobs and investment, reduce the volatility of electricity prices for Massachusetts consumers, and mitigate the adverse environmental and economic effects of climate change.

4. Massachusetts must continue to push for stronger RGGI limits through 2030 during the 2016 Program Review process

As previously discussed, the RGGI program has been extraordinary successful, and is tailor-made for locking in the necessary electric sector reductions to ensure attainment of Massachusetts' climate goals. Establishing a RGGI cap consistent with Massachusetts and the other RGGI states' 2030 climate goals is the best way to ensure Massachusetts is on the necessary long-term trajectory for decarbonization of the electric sector. With the current RGGI program review ongoing, we urge DEP to advocate for final pollution limits that decline by 5% annually from 2020 levels through 2030, consistent with the result of Synapse's least-cost analysis.

B. Transportation and Heating

1. Gas leaks from natural gas infrastructure must be addressed

The Sierra Club has already filed comments with the DEP on this point via Energy Committee member David Zeek, and supports the structure of limits contemplated by DEP's proposal (15).

2. Massachusetts should implement declining limits on carbon pollution from the transportation sector, including a mechanism to price pollution and invest in electric vehicles, public transit, and accessible communities

The transportation sector represents approximately 40% of Massachusetts' current GHG emissions and is a major emitter of other air pollutants (16). The Commonwealth cannot meet its 2020 targets, or other future goals, without more robust policies to increase the number of electric vehicles, expand public transit ridership, increase intercity train and bus use, increase carpooling and demand-responsive shared-ride services, and promote communities that are more accessible to walking and biking. We applaud Massachusetts for joining with seven other states in a ZEV Memorandum of Understanding ("MOU") and corresponding Multi-State Action Plan to commit to a goal of 3.3 million ZEVs on the road by 2025 across the eight states (17), and for joining the International ZEV Alliance in pursuit of making all new passenger vehicles in their jurisdictions ZEVs by no later than 2050.

The Sierra Club supports the requirements in the Executive Order that DEP "revise the Global Warming Solutions Act requirements for the Massachusetts Department of Transportation set forth in 310 C.M.R. 60.05 to establish declining annual aggregate emissions limits" and that the Secretary of Energy and Environmental Affairs "work, in consultation with the Secretary of Transportation, with New England and Northeastern state transportation, environment and energy agencies to develop regional policies to reduce greenhouse gas emissions from the transportation sector consistent with meeting the GWSA's 2050 and interim emissions limits". We encourage the administration to formally join the Transportation and Climate Initiative's regional effort to use market-based mechanisms to invest in reducing carbon pollution from transportation (18), applying lessons learned from RGGI to both the transportation and heating sectors.

By establishing a limit on carbon pollution for power plants and requiring polluters to purchase allowances, RGGI has made over $300 million available for Massachusetts residents to use for energy efficiency and clean energy investments. While we support the proposed rules for public vehicles, it will not be sufficient to achieve the GWSA goals over the long term. A comparable program to RGGI for transportation, which would instead apply aggregate limits for pollution to "prime suppliers" of petroleum fuels (19) to the Commonwealth, could provide long-term funding for the successful MOR-EV rebate program, support public transit, and help transform communities. This should include more bikeshare programs and bike lanes and completing commitments to purchase at least 100 electric buses by 2020 and reach 100% zero emission buses in public fleets by 2030 and organize demand-responsive shared-ride services.

3. Encourage Greater Investment in Air and Ground-source Heat Pumps

While not addressed in the proposed regulations, reducing pollution from oil and gas use for heating and cooling buildings by transitioning to air and ground-source heat pumps is similarly a largely untapped compliance mechanism to meet GWSA requirements. We appreciate the inclusion of these technologies within proposed changes to the Alternative Portfolio Standard (20), but those changes do not appear to have been finalized. DEP should finalize those rules immediately. The administration should also institute a declining limit on pollution from heating and cooling buildings, again applying similar mechanisms as those employed by RGGI in the electric sector, to invest in programs to help consumers switch to air and ground-source heat pumps. Such a system could be complemented by allowing Massachusetts utilities to include measures to support conversions to heat pumps in efficiency programs pursuant to the Green Communities Act.

C. Environmental justice and equity

There are multiple requirements in the GWSA for consultation and analysis related to low-income communities and areas that have the most exposure to air pollution, particularly for any market-based mechanisms employed, directing the Secretary to "(1) consider the potential for direct, indirect and cumulative emission impacts from these mechanisms, including localized impacts in communities that are already adversely impacted by air pollution; (2) design any market-based compliance mechanism to prevent any increase in the emissions of toxic air contaminants or criteria air pollutants, with particular attention paid to emissions of nitrous oxide, sulfur dioxide and mercury; and (3) maximize additional environmental and economic benefits for the commonwealth, as appropriate". The Sierra Club is encouraged that the administration has held at least two meetings in overburdened communities during the 2016 Program Review of RGGI. Since we are encouraging applying the lessons from RGGI to the transportation and heating sectors, we strongly recommend that DEP undertake such consultations and analysis as soon as possible for both of those sectors. While we recognize that electrifying transportation and heating will both help achieve Massachusetts' climate goals and reduce health-damaging pollution, it is critically important that the most overburdened and underserved communities have access to the economic opportunities created as well.

III. Conclusion

Meeting the challenges of reducing climate-disrupting pollution has never been more important. Again, the Sierra Club applauds the administration for taking the responsibilities of the Global Warming Solutions Act seriously and proposing these regulations. While the emissions caps for electricity generating facilities, focus on clean energy, and commitments to cleaner public vehicles are laudable, the proposals are not sufficient to keep the Commonwealth on

commitments to cleaner public vehicles are laudable, the proposals are not sufficient to keep the Commonwealth on track to meet the medium and long term obligations. The DEP should accelerate the reduction trajectory of carbon pollution limits for both existing and new power plants, work with the legislature to increase the RPS, expeditiously finalize contracts for new wind and solar projects, and limit, price, and reduce pollution from upstream sources of pollution in the transportation and heating sectors in order to invest in electric vehicles, heat pumps, and more accessible communities. The DEP should also undertake analysis of the equity impacts of its proposals for overburdened and underserved communities, including consultation with those communities.

1) http://www.mass.gov/governor/legislationexecorder/execorders/executive-order-no-569.html
2) https://www.bostonglobe.com/metro/2016/08/28/massachusetts-presses-other-states-region-cut-emissions/cwBDURmXXdD32CYfNwlExI/story.html
3) https://cleanenergyrfp.com/2016/10/25/bidders-selected-for-contract-negotiation/
4) http://www.mass.gov/eea/docs/eea/energy/cecp-for-2020.pdf
5) http://www.synapse-energy.com/sites/default/files/RGGI_Opportunity_2.0.pdf
6) http://www.masscec.com/2015-massachusetts-clean-energy-industry-report
7) http://www.mass.gov/eea/docs/dep/air/climate/7-77-facility-caps-11-7-16.doc
8) http://www.ct.gov/deep/cwp/view.asp?a=4423&Q=568878&deepNav_GID=2121
9) http://www.mass.gov/eea/docs/dep/air/climate/7-75-clean-energy-standard-11-7-16.doc
10) http://www.mass.gov/eea/docs/dep/air/climate/ces-comments.pdf
11) An Analysis of the Impact of Additional RE Procurements and RPS Targets on MA RPS & GWSA Compliance, prepared by Sustainable Energy Advantage for the Sierra Club, June 2016
12) http://www.synapse-energy.com/about-us/blog/numbers-massachusetts-kain-decision-greenhouse-gas-reduction-targets
13) See Order Adopting a Clean Energy Standard, PSC Case No. 15-E-0302 (Aug. 1, 2016)
14) https://malegislature.gov/Bills/189/House/H4568
15) http://www.mass.gov/eea/docs/dep/air/climate/7-73-distribution-gas-leaks-11-7-16.doc
16) http://www.mass.gov/eea/air-water-climate-change/climate-change/massachusetts-global-warming-solutions-act/ma-ghg-emission-trends/
17) ZEV Multi-State Task Force, Multi-State ZEV Action Plan 2 (May 2014)
18) http://www.transportationandclimate.org/five-northeast-states-and-dc-announce-they-will-work-together-develop-potential-market-based
19) http://www.eia.gov/petroleum/marketing/prime/
20) http://www.mass.gov/eea/energy-utilities-clean-tech/renewable-energy/renewable-thermal/renewable-heating-and-cooling-alternative-portfolio-std.html

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Q1: First Name (optional)	Paul
Q2: Last Name (optional)	Dale
Q3: Company or Organization - if applicable (optional)	*Respondent skipped this question*

Q8: Which emission source(s) does your comment address

Electricity Generation & Distribution ,

Natural Gas Distribution System Leaks ,

Transportation, Land Use & Smart Growth

Q9: Please type your comment below.

Thank you for the opportunity to comment on proposed regulations related to reducing GHG emissions through section 3d of the GWSA.

Transportation. Transportation represents 40% of the emissions in the Commonwealth, yet the DEP's GWSA Regulations Stakeholder Meetings make clear that the DEP is not planning any significant actions w.r.t. the transportation sector. Instead, the DEP is relying on national EPA MPG standards for auto makers (CAFE) to yield a 3.1% reduction. This is untenable. In the prior presidential election, Mitt Romney vowed to overturn them if elected, and now Donald Trump intends to dismantle the EPA and EPA regulations on a much larger scale. The DEP cannot and must not rely on transportation emissions reductions though federal regulations.

Massachusetts, and the DEP in particular, must promulgate its own regulations to achieve reductions in transportation as part of achieving the 2020 GWSA. At a minimum, the DEP should adopt the CAFE standards for vehicles sold in Massachusetts. But the DEP needs to be forward looking beyond 2020. Part of doing so is to strengthen the vehicle standards significantly to make much more significant reductions in transportation. Auto makers need time to react to new standards.

The DEP and DOT need to be "one team" to address the transportation emissions problem. Everything possible must be done to fix and enhance the mass transit systems. Furthermore, the DEP and DOT should consider emissions as a top priority topic when considering plans for roads and parking. For example, the construction of a 5200 car parking lot by DOT is not justifiable, unless only hybrid or electric vehicles are allowed to park.

Gas Leaks. The DEP should require the strictest regulations to cap methane leaks from existing gas pipelines, beginning with leaks identified as 'super emitters' (currently 7% of leaks account for 50% of leaked gas), but including every level of methane gas leaks, through a sustained program. There should be zero emissions from leaky, existing gas pipelines. The current practice that allows gas companies to avoid action on leaks is inexcusable.

Electricity Generation. The existing regulatory programs RGGI and RPS are known to work from both an economy standpoint and from the standpoint of reducing emissions. Now is the time to strengthen them. Waiting until 2020 or beyond makes the attainment of the 2030 and 2050 goals out of reach or highly unlikely. I applaud the Governor for taking the initiative for a 5% annual reduction in the RGGI cap. The DEP must strongly support this. The DEP should educate the legislature and the citizens about the need to raise the annual RPS increases above 1% to meet our emissions obligations.

Final Thought. I encourage the DEP staff to watch Leonardo DiCaprio's movie "Before the Flood". It will give new meaning and importance for the work you do, and reinforce your need to be champions of a clean energy future. You can watch it at https://www.youtube.com/watch?v=rpCTGicxoso (1hr 30 min) or by searching for it on YouTube.

Thank you,

Paul Dale
12 Grace Rd.
Wayland, MA 01778

paulbdale@gmail.com Cell: 617 794-0851

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Q1: **First Name (optional)**	David
Q2: **Last Name (optional)**	Heimann
Q3: **Company or Organization - if applicable (optional)**	*Respondent skipped this question*
Q8: **Which emission source(s) does your comment address**	Other (please specify) Reducing Greenhouse Gas Emissions

Q9: **Please type your comment below.**

Dear Sirs:

Thank you for promulgating these proposed rules on reducing the generation of greenhouse gases (GHGs), as per the Global Warming Solutions Act and Governor Baker's Executive Order 569. In terms of comments, I am in complete agreement with the comments submitted by the Sierra Club Massachusetts Chapter, as well as David Zeek, a member of the Chapter.

While the results of the recent elections make your job more difficult, rest assured that I fully support you in your anti-GHG endeavors!

Sincerely,
David Heimann

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Q1: **First Name (optional)**	Danielle
Q2: **Last Name (optional)**	Winter
Q3: **Company or Organization - if applicable (optional)**	Keegan Werlin LLP

Q8: Which emission source(s) does your comment address Natural Gas Distribution System Leaks

Q9: Please type your comment below.

KEEGAN WERLIN LLP
ATTORNEYS AT LAW
265 FRANKLIN STREET
BOSTON, MASSACHUSETTS 02110-3113 TELECOPIERS:
——— (617) 951-1354
(617) 951-1400 (617) 951-0586

November 16, 2016

Ms. Sharon Weber
Deputy Division Director, Air & Climate Programs
Department of Environmental Protection
One Winter Street, 7th Floor
Boston, MA 02108

Re: Natural Gas Local Distribution Companies' Joint Comments on Proposed Methane Emissions Regulations

Dear Ms. Weber:

On behalf of the Massachusetts natural gas local distribution companies, specifically Fitchburg Gas and Electric Light Company d/b/a Unitil ("Unitil"), The Berkshire Gas Company ("Berkshire"), Boston Gas Company and Colonial Gas Company each d/b/a National Grid ("National Grid"), Liberty Utilities (New England Natural Gas Company) Corp. d/b/a Liberty Utilities ("Liberty"), Bay State Gas Company d/b/a Columbia of Massachusetts ("CMA"), and NSTAR Gas Company d/b/a Eversource ("Eversource") (collectively, the "LDCs"), please find below the LDCs' Joint Comments in response to the Massachusetts Department of Environmental Protection's ("DEP") request for stakeholder comments on proposed methane emissions regulations.

Thank you for your attention to these Joint Comments. Please contact me directly if you have any questions.

Sincerely,

Danielle C. Winter

COMMONWEALTH OF MASSACHUSETTS

DEPARTMENT OF ENVIRONMENTAL PROTECTION

_____)
)
Joint Initial Comments filed on behalf of)
Fitchburg Gas and Electric Light Company d/b/a Unitil,)
The Berkshire Gas Company, Boston Gas Company and)
Colonial Gas Company each d/b/a National Grid,)
Liberty Utilities (New England Natural Gas Company))
Corp. d/b/a Liberty Utilities, Bay State Gas Company)
d/b/a Columbia Gas of Massachusetts, NSTAR Gas)

Company d/b/a Eversource Energy)
)

JOINT INITIAL COMMENTS OF THE MASSACHUSETTS
NATURAL GAS LOCAL DISTRIBUTION COMPANIES

EXECUTIVE SUMMARY

In keeping with the Commonwealth's energy policies, Massachusetts natural gas local distribution companies ("LDCs") are substantially reducing greenhouse gas ("GHG") emissions. Annual data demonstrates that emissions from natural gas systems are on the decline and below 1990 levels. As noted in the 2015 Update to the Clean Energy and Climate Plan ("2015 CECP Update"), natural gas system GHG emissions have decreased from three percent in 1990 to one percent in 2012 of total Massachusetts GHG emissions, which far exceeds the reductions contemplated by the Global Warming Solutions Act ("GWSA"). 2015 CECP Update at 4-5, 8 and Figures 2 & 5. In addition, the LDCs' continued planned leak-prone infrastructure replacement will continue to achieve emissions reductions.

Specifically, the LDCs are implementing Gas System Enhancement Program ("GSEP") Plans, pursuant to authorization granted by the Department of Public Utilities ("Department") since January 1, 2015, to accelerate the replacement of aging and leak-prone natural gas pipeline infrastructure pursuant to G.L. c. 164, § 145. The LDCs' GSEPs further the achievement of the goals of the GWSA because reduction of GHG emissions is an important result of the GSEPs. The LDCs' implementation of their GSEPs will result in increasing GHG emissions reductions on an annual basis in a cost and resource efficient manner.

The LDCs are committed to achieving reductions in GHG emissions through implementation of their GSEPs. The LDCs are also committed to continuing to make GHG emissions reductions part of their business focus. Consistent with the requirements of Section 13 of Chapter 188 of the Acts of 2016, the LDCs are working with the Department, the Massachusetts Department of Environmental Protection ("DEP") and stakeholders to prioritize the repair of Grade 3 leaks; specifically those Grade 3 leaks that have a significant environmental impact. Through their award-winning energy efficiency programs, the LDCs offer customers the opportunity and means to utilize natural gas efficiently. Additionally, the LDCs facilitate the conversion of customers from home heating oil to natural gas, which carries with it a significant reduction in GHG emissions. The LDCs look forward to working with the DEP to recognize GHG reductions from the natural gas industry and to incorporate the reductions in the DEP's proposed emissions regulations.

Although the LDCs seek to maximize environmental benefits through their respective capital programs and customer-focused offerings, their paramount commitment must continue to be the provision of safe and reliable service to their customers. As discussed further below, achieving the objectives of the GWSA does not and cannot supersede the LDCs' statutory public service obligation to provide safe and reliable natural gas service to their customers. A deliberate balance of this critical statutory obligation with the important goals of the GWSA will lead to emissions regulations that are carefully crafted to achieve the Commonwealth's energy and environmental policies.

I. INTRODUCTION

On May 17, 2016, the Massachusetts Supreme Judicial Court ruled that the GWSA requires the DEP to promulgate new regulations that: (1) impose a limit on GHG emissions that may be released; (2) limit the aggregate emissions released from each group of regulated sources or categories of sources; (3) set emission limits for each year; and (4) set limits that decline on an annual basis in order to meet the requirements of M.G.L. c. 21N, § 3(d) ("Section 3(d)"). Kain v. Department of Environmental Protection, 474 Mass. 278 (2016).

On September 16, 2016, Governor Baker signed Executive Order 569, Establishing an Integrated Climate Change Strategy ("Executive Order"), which directed the Executive Office of Energy and Environmental Affairs ("EOEEA") to coordinate and make consistent new and existing efforts to mitigate and reduce GHG emissions and to build resilience and adapt to the impacts of climate change. The Executive Order directed the DEP to consider limits from, among other sources or categories of sources, leaks from natural gas distribution systems in Massachusetts. Executive Order at 3. Lastly, the Executive Order directed the DEP to promulgate regulations that satisfy the mandate of Section 3(d) to ensure that the Commonwealth meets the 2020 statewide emissions limit mandated by the GWSA. Id.

The Executive Order requires the DEP to publish, no later than December 16, 2016, its proposed regulations consistent with the GWSA, the Kain decision and the Executive Order and to hold, no later than February 24, 2017, a public hearing on the proposed regulations. Id. Pursuant to the Executive Order, the DEP must, no later than August 11, 2017, promulgate final regulations that satisfy the mandates of Section 3(d) and are designed to ensure that the

2017, promulgate final regulations that satisfy the mandates of Section 3(d) and are designed to ensure that the Commonwealth meets the 2020 statewide emissions limit mandated by the GWSA. Id.

In order to meet the directives set out in Kain and the Executive Order as those directives relate to the reduction of leaks from the natural gas distribution system, the DEP scheduled a series of stakeholder meetings, open to the public, on November 2 and 3, 2016, to present the framework of its proposed regulations concerning limiting the emissions from leaks on natural gas distribution systems. The DEP also encouraged stakeholders to file written comments on the proposed regulatory framework by the November 16, 2016 deadline.

Representatives from the LDCs attended the November 2nd and 3rd stakeholder sessions. Based on the discussion at those sessions and in recognition of the comment deadline, the following LDCs offer the comments and suggestions contained herein for the DEP's consideration: Fitchburg Gas and Electric Light Company d/b/a Unitil ("Unitil"), The Berkshire Gas Company ("Berkshire"), Boston Gas Company and Colonial Gas Company each d/b/a National Grid ("National Grid"), Liberty Utilities (New England Natural Gas Company) Corp. d/b/a Liberty Utilities ("Liberty Utilities"), Bay State Gas Company d/b/a Columbia of Massachusetts ("CMA"), and NSTAR Gas Company d/b/a Eversource Energy ("Eversource").

The LDCs appreciate the opportunity to offer these comments and suggestions in order to assure that any final regulations designed to limit emissions from the natural gas distribution systems are appropriately and accurately developed. The LDCs look forward to actively participating in the remainder of the DEP's rulemaking proceeding.

II. THE LDC PUBLIC-SERVICE OBLIGATION

The LDCs have a public-service obligation to provide safe and reliable service to their customers at a reasonable cost. NSTAR Gas Company, D.P.U. 14-150, at 307 (2015); New England Gas Company, D.P.U. 10-114, at 76 (2011), citing Report to the Legislature Re: Maintenance and Repair Standards for Distribution Systems of Investor-Owned Gas and Electric Distribution Companies, D.P.U. 08-78, at 4 (2009); Incentive Regulation, D.P.U. 94-158, at 3 (1995). Ensuring that both current and future natural gas customers are provided with safe and reliable service is the heart of the regulatory and oversight mission of the Department. Regulations affecting the LDC distribution systems must be grounded in this fundamental principle and cannot diminish, impair or negate the LDCs' ability to provide safe and reliable service to their customers, both now and in the future.

Consistent with the service and franchise provisions of 220 C.M.R. 14.00 and Department-approved tariffs, the LDCs have the right to expand access to natural gas service. In fact, Massachusetts law expressly authorizes the LDCs to undertake additional efforts to facilitate the extension of natural gas service to new customers. Section 3 of Chapter 149 of the Acts of 2014, An Act Relative to Natural Gas Leaks (the "Act") requires the Department to authorize LDCs to design and offer programs to customers that increase the availability, affordability and feasibility of natural gas service for new customers. Section 3(a) of the Act authorizes, subject to Department review and approval, LDCs to implement alternative rate mechanisms or company project review methodologies that facilitate access to natural gas service for new off-main customers. Furthermore, the LDCs are authorized to propose, for the Department's review and approval, other cost-effective programs that reasonably accelerate the expansion of and conversion to natural gas usage in the Commonwealth, including programs that are likely to accelerate the conversion or expansion to natural gas usage for low-income consumers currently eligible for the federal Low Income Home Energy Assistance Program ("LIHEAP"). Chapter 149 of the Acts of 2014, §§ 3(b) and (d).

Thus, the provisions of the Act envision and encourage the LDCs to increase access to natural gas resources to Massachusetts customers through greater optimization of the current distribution system and/or gas main expansions. Any final regulations promulgated during the course of the DEP's rulemaking proceeding must work in concert with this statutory authorization and cannot impinge upon, restrict or prevent the expansion of the LDC distribution systems in contravention of the Act.

Within that context, the LDCs recognize the importance of reducing GHG emissions consistent with the mandates of the GWSA and are committed to reducing emissions from the distribution system in a reasonable and practical way. The LDCs are certain that, consistent with the judicial principles of statutory construction, the careful and deliberate development of regulations designed to meet the requirements of Section 3(d), without impinging upon the LDCs' obligation to provide safe and reliable service to current and future customers, will further the Commonwealth's goals to mitigate future climate change. The LDCs' comments and recommendations detailed below are intended to aid in achieving these important goals.

III. DEP'S PROPOSED REGULATORY FRAMEWORK

As delineated in the stakeholder discussion slides that formed the basis of the DEP's stakeholder sessions and the draft regulatory text published by the DEP on November 7, 2016, the LDCs understand that the DEP proposes to develop maximum annual methane emissions for each LDC with a GSEP and an aggregate cap that equals the sum of the LDCs' individual caps.

The DEP has indicated that it intends to develop the individual caps by (1) taking an LDC's miles of main and number of services by type (bare steel, cast iron, etc.) as reported by the LDC to the U.S. Department of Transportation ("USDOT") Pipeline and Hazardous Materials Safety Administration ("PHMSA") , and (2) multiplying the results by the emissions factors developed in the natural gas methane study undertaken by Washington State University, which was partially funded by the Environmental Defense Fund (hereinafter referred to as the "WSU/EDF emissions factors"). DEP has indicated that the individual LDC caps include an on-main growth factor developed using the growth factors reported by the LDCs in their individual forecast and supply plans ("F&SPs") filed with the Department pursuant to M.G.L. c. 164, §

the LDCs in their individual forecast and supply plans (“F&SP”) filed with the Department pursuant to M.G.L. c. 164, § 69I. The DEP’s proposed regulatory framework establishes declining emissions for the length of each LDC’s GSEP. The DEP has encouraged stakeholders to comment on the proposed framework, including whether enforcement should be predicated on achievement of both the individual and aggregate caps and whether its proposed regulations should include the years following 2020. The LDCs are encouraged by the DEP’s intention to calculate the individual LDC emissions caps by (1) taking an LDC’s miles of main and number of services by type as reported to PHMSA; and (2) multiplying the results by appropriate emissions factors. Although the most direct indicator of methane emissions from the distribution systems would be a measure of lost gas volume, there are no generally accepted industry practices, procedures or technology that readily or accurately measure lost gas volumes from leak-prone infrastructure in a manner feasible for LDC operations. Additionally, since current law and regulation are primarily aimed at preserving the public safety and system reliability, the LDCs do not have procedures in place that involve the collection of data that would be necessary to estimate lost volumes, and relatedly emissions, with any level of precision. Thus, DEP’s proposed emissions cap calculation is a reasonable approach that will enable compliance with Kain and the GWSA. With that in mind, below, the LDCs identify critical concerns with the proposed regulatory framework and recommend solutions to address those concerns.

1. Calculation of Individual Caps

As an initial matter, the LDCs note that Table 9, which calculates the Methane Emission Factors by Material Type and is located on pages 6-7 of the draft regulatory text, contains significant calculation errors. Based on the LDCs’ review and calculations, the factors appear to be off by a factor of 1 million and several of the numbers within the table are incorrect. In the table below, the LDCs have recalculated the emissions factors from Table 9 by applying the same conversion to all of the factors and using a Global Warming Potential (“GWP”) of 25. The revised Table 9 has been included below, with redlines included for ease of review.

REVISED Table 9 - Methane Emission Factors by Material Type
Mains Metric tons of carbon dioxide equivalent/mile-year
Cast or wrought iron 28,663,225 28.9822023529412
Ductile iron
Copper
Steel, cathodically unprotected and uncoated 20,281,978 21.1862480418848
Steel, cathodically unprotected and coated
Other

Steel, cathodically protected and uncoated 1,804,054 2.33726021052632
Steel, cathodically protected and coated
Plastic 215,583 0.84502165787234

Services Metric tons of carbon dioxide equivalent/service-year
Steel, cathodically unprotected and uncoated 129,589 0.349456796769852
Steel, cathodically unprotected and coated
Cast or wrought iron
Ductile iron
Other
Steel, cathodically protected and uncoated 55,982 0.0315668269794721
Steel, cathodically protected and coated
Plastic 5,136 0.00498346666666667
Copper 121,920 0.126144

The LDCs appreciate that the DEP has recognized that it is appropriate to account for distribution system growth in the individual LDC emissions caps. Recognition of system growth, both through new service lines and the addition of new main to the system, within the emissions cap strikes an appropriate balance between the GWSA’s directives and the LDCs’ statutory authority to facilitate expanded access to natural gas service pursuant to Department-approved tariffs, the provisions of 220 C.M.R. 14.00 and the directives of Section 3 of Chapter 149 of the Acts of 2014.

However, the growth identified in the LDCs’ individual F&SPs is not the appropriate source to use to reflect growth under the proposed emissions caps. The F&SPs are designed to demonstrate that the LDC’s gas-resource planning process has resulted in a reliable gas supply portfolio that meets the combined forecasted needs of customers at low costs. The growth factors contained in the F&SPs do not indicate, in any way, for the miles of main and number of services the LDC may need to add to its respective distribution system to meet expected customer growth. Additionally, the growth factors contained in the LDCs’ F&SPs are typically conservative projections consistent with the requirements of the Department and may not accurately reflect actual growth over time. Therefore, the F&SP growth factors should not be used as a source to determine on-main growth factors for the individual emissions caps.

Instead, the LDCs recommend that the DEP appropriately account for forecasted main and service growth in the LDCs’ individual service territories by using the LDC-specific growth forecasts included in Appendix A located at the end of

these comments. These growth factors more accurately reflect each LDC's expected growth through the expansion of its distribution system infrastructure. The LDCs recommend that the DEP include a main and services growth factor so that the individual LDC emissions caps, and necessarily the aggregate cap, do not inadvertently restrain an LDC's authority to grow its system and customer base consistent with the service and franchise provisions of 220 C.M.R. 14.00, the terms of the LDC's approved tariffs and the directives of Section 3 of Chapter 149 of the Acts of 2014. Such inadvertent restraints on system growth could compel the need for a service moratorium on new customers. Moratoriums on extending service to new customers frustrates the LDCs' authority to serve customers within their defined service territories consistent with franchise rights and the Commonwealth's clearly delineated goal of facilitating customer access to natural gas service. In order to avoid such a potential conflict between the Commonwealth's emissions reductions goals and natural gas access goals, the LDCs recommend that the DEP appropriately account for forecasted main and service growth across the service territories using the factors contained in Appendix A.

As a corollary to the requirement that both mains and service growth be appropriately accounted for in the development of the individual LDC emissions caps, the cap calculation must also recognize that system growth arising from a customer's conversion from oil to natural gas results in a reduction of emissions. Failure to reflect these emissions reductions is contrary to the Commonwealth's clear preference to promote customer conversions to natural gas. See Clean Energy and Climate Plan for 2020 (2015 Update), at 55-65 (focus on the design and implementation of energy efficiency programs and stretch building codes to effectuate conversions and reduce GHG emissions).

By utilizing appropriate main and service growth factors and an oil-to-gas GHG emissions reduction factor, the DEP will be able to calculate individual LDC emissions caps that better reflect the realities of LDC operations in Massachusetts, along with capturing the emissions reductions associated with those realities. Calculation of the cap using these additional factors is consistent with the mandates of the GWSA, as reaffirmed by Kain and the Executive Order, to establish a desired level of declining annual aggregate GHG emissions limits. Section 3(d).

In addition to correctly capturing system growth and attendant emissions reductions, the individual LDC emissions caps must also clearly delineate what sources of emissions from the distribution systems are not included in the calculation of the cap. The LDCs appreciate that the DEP's proposed regulations recognize that emissions will inevitably arise from issues outside of the LDCs' control, such as third-party damages to distribution system assets; dig-ins during construction near distribution system assets; acts of vandalism; or emergency events, including but not limited to fires, floods, earthquakes, and weather events such as storms, and that such emissions are appropriately excluded from the individual caps calculated under the DEP's proposed regulatory framework. Although the LDCs take prudent and diligent steps to safeguard distribution system assets from outside impacts, situations arise that are outside of the LDCs' control. The LDCs will continue to take steps to guard against these situations and to mitigate the impact of these situations on the distribution systems; however, emissions increases due to third-party actions or emergency events, as evidenced by the DEP's proposed regulatory framework, are appropriately excluded from the calculation of the LDCs' individual emissions caps.

The LDCs also encourage the DEP to utilize the U.S. Environmental Protection Agency ("EPA") emissions factors as the basis for calculating the individual LDC emissions caps. The LDCs currently rely on the EPA emissions factors for the EPA's Subpart W annual reports concerning emissions associated with natural gas distribution systems. The EPA emissions factors have been peer-reviewed and have been determined to be accurately calculated. Use of the EPA emissions factors would result in consistent calculation and reporting of distribution system emissions.

Lastly, the individual emissions caps cannot be set at a level below the minimum emissions for a distribution system composed of plastic and coated steel main. As indicated by the DEP, the emissions caps are tied to each LDC's GSEP, all of which set out the LDCs' plans to replace all leak-prone, e.g. bare steel and cast iron, infrastructure with plastic and coated steel. Execution of GSEPs will result in significant reduction of GHG emissions, but the DEP, and consequently the individual emissions caps, must recognize that and account for a certain level of emissions associated with a distribution system composed of plastic and coated steel mains, services and ancillary facilities. These emissions are unavoidable as there is no alternative "emissions-proof" mains and services material available to use in place of plastic and coated steel. Given that the LDCs are operationally unable to mitigate or eliminate the emissions associated with a distribution system composed of plastic and coated steel mains, services and ancillary facilities, the individual emissions caps developed following the completion of the GSEPs cannot be set at a level below the minimum amount of emissions expected from the reconstructed distribution systems. Setting an emissions cap below the minimum amount of emissions associated with plastic and coated steel infrastructure produces an unacceptable outcome because it will be impossible for the LDCs to comply with the emissions cap. Such a result is wholly inappropriate and contrary to the intent of the GWSA, which seeks to set ambitious but achievable emissions reductions.

2. Compliance and Enforcement

Given that an individual LDC is able to undertake actions (such as implementation of its GSEP) only in relation to the reduction of emissions on its own distribution system, any determination of compliance and related enforcement actions must be tied solely to an LDC's management of its distribution systems under its individual emissions cap. The LDCs work collaboratively on a variety of issues affecting their industry and regularly share lessons learned and best practices; however, the LDCs exist as separate legal entities with no ability to dictate or enforce another LDC's actions or inactions. This represents a risk of non-compliance that an LDC cannot manage, mitigate or eliminate. This inability to address the risk renders compliance with the aggregate emissions cap and any enforcement actions arising from non-compliance with the aggregate cap inappropriate and inequitable.

non-compliance with the aggregate cap inappropriate and inequitable.

The DEP can fully meet the requirements of the GSWA, as affirmed by Kain, regarding limiting the aggregate GHG emissions released from a sector without determining an LDC's compliance with both its individual emissions cap and the aggregate cap and undertaking enforcement actions related to non-compliance with the individual and/or the aggregate cap. Section 3(d) of the GWSA required the DEP to promulgate regulations that establish a desired level of declining aggregate GHG emissions limits. The DEP will meet this requirement through the establishment of the individual caps, which taken as a whole, assuming compliance, will result in declining aggregate emissions.

Neither the GWSA nor the Kain decision requires the DEP to determine an individual entity's compliance with both its individual cap and the aggregate cap and then undertake appropriate enforcement actions against that entity depending on non-compliance with the individual and/or aggregate cap. In this instance, the aggregate cap should be used solely as an informational tool to demonstrate that, as a whole, the LDCs' individually enforceable emissions caps result in declining annual aggregate emissions limits. The DEP's use of the aggregate cap in this manner meets the requirements of Section 3(d) without impermissibly punishing LDCs for actions beyond their control, specifically the actions or inactions of a fellow LDC in managing its performance under its individual cap.

As noted above, the DEP has indicated that it intends to use the LDCs' individually developed and administered GSEPs as the starting point to develop the individual emissions caps. The GSEPs, as recognized by the Department, were developed with a degree of flexibility to account for unforeseen operational or other circumstances, such as contractor scarcity, street opening moratoriums, weather, and other factors that may affect an LDC's ability to complete its estimated miles of main/number of services replacements in any given year. The GSEPs represent a 20 to 25-year commitment by the LDCs to accelerate the removal of leak-prone infrastructure and, while the Department evaluates an LDC's actual replacements in a given year, the LDCs are managing their replacement activities under the accelerated 20-25 year timelines approved by the Department.

The DEP has indicated that it intends to use the miles of main figures reported by the LDCs to PHMSA to develop the emissions cap. As an initial matter, if the DEP ultimately decides to rely on the data reported to PHMSA in the proposed regulations, it must include a provision that enables the LDCs to address recordkeeping adjustments that an LDC may need to make to the data reported to PHMSA to ensure that the reports accurately reflect all main replacements completed each year by material type.

In the event that an LDC is prevented from replacing all of its estimated miles of main/number of services during a given GSEP year due to: (1) operational determinations that alternate replacement activities were required to ensure safety and reliability of the system, or (2) circumstances beyond its control, it will be unable to manage its performance under its individual emissions cap. In order to avoid the untenable situation where an LDC is subject to an enforcement action for non-compliance with the DEP's regulations due to the need to undertake operationally necessary alternate replacement activities or due to circumstances beyond its control, the DEP must include provisions for a waiver from its regulations and/or a mechanism allowing for a recalculation of an LDC's individual emissions cap to reflect actual circumstances, such as changes to an LDC's GSEP, including but not limited to the extension of the overall GSEP timeline for complete replacement of leak-prone infrastructure. Under such a waiver/recalculation mechanism, an LDC would be required to present sufficient data and supporting documentation to the DEP justifying the need for the requested waiver or cap recalculation. Utilizing a waiver/recalculation mechanism ensures that the DEP's regulations recognize the need for inherent flexibility in the GSEPs to account for and react to operational needs and circumstances beyond an LDC's control without negatively impacting an LDC's core obligation to provide safe and reliable service to customers.

Similarly, the DEP's regulations must include a mechanism to allow an LDC to seek a recalculation of its individual emissions cap in the event that actual service line and/or new main growth is greater than the original growth factor embedded in the emissions cap. Depending on actual growth rates as compared to estimated rate, required compliance with the cap may impermissibly impinge upon an LDC's ability to facilitate access to natural gas service to new customers, leading to potential moratoriums on service to new customers. Under this recalculation mechanism, an LDC would be required to demonstrate and support actual system growth.

Additionally, the LDC would need to demonstrate that, even under a recalculated growth factor, its recalculated individual emissions cap would result in declining annual emissions on its system. Incorporating a growth factor recalculation provision in the DEP's proposed regulations ensures that: (1) the DEP is compliant with the directives of Section (d) and Kain; (2) an LDC is continuing to demonstrate declining emissions from its systems; and (3) the regulations do not conflict with an LDC's authority to facilitate natural gas service to new customers consistent with the service and franchise provisions of 220 C.M.R. 14.00, the provisions of the LDCs' approved tariffs, and the directives of Section 3 of Chapter 149 of the Acts of 2014.

Lastly, the draft regulatory text circulated by the DEP on November 7, 2016 included individual emissions caps developed for 2015 through 2017. Given that the enforcement provisions of the draft regulatory text do not indicate that compliance with and enforcement under the emissions cap regulations commences on a date certain, e.g. January 1, 2018, following the promulgation of final regulations on August 11, 2017, the LDCs interpret the DEP as applying the caps, and any potential enforcement actions, retroactively. If accurate, such retroactive application is inappropriate since the LDCs will be unable to assess their individual GSEPs through the lens of final, LDC-specific emissions caps to ensure that the GSEPs are being administered in a manner that will enable the LDC to remain below the cap. Any enforcement action resulting from non-compliance with the final emissions cap regulations prior to their adoption and

enforcement action resulting from non-compliance with the final emissions cap regulations prior to their adoption and publication by the DEP on August 11, 2017, including the imposition of civil administrative penalties pursuant to G.L. c. 21A, § 16, G.L. c. 111, § 2C, G.L. c. 111 §§ 142A through 142M, and G.L. c. 21N § 7(d), would be impermissibly punitive and unjust. To avoid such a result, the timeframe for compliance with and enforcement under the finalized regulations should commence January 1, 2018.

By determining compliance and enforcement on an individual LDC basis and incorporating the narrowly tailored waiver/recalculation recommendations described above, the DEP will develop regulations for the natural gas sector that appropriately balance the LDCs' competing obligations related to safety and reliability, their authorization to facilitate access to natural gas and reduce GHG emissions from their individual distribution systems. Careful attention to the appropriate balance will result in regulations that accomplish the Commonwealth's energy and environmental goals to the benefit of all.

3. Timeframe for LDC emissions caps

The DEP has requested that stakeholders provide comments as to whether the proposed regulations should include the years following 2020. The GWSA required the DEP to promulgate regulations "not later than January 1, 2012, which regulations shall take effect on January 1, 2013, and shall expire on December 31, 2020." Global Warming Solutions Act of 2008, Acts of 2008, Chapter 298, § 16. The Executive Order requires the Secretary of the EOEEA to continue to consult with the GWSA Implementation Advisory Committee regarding recommendations on establishing statewide GHG emissions limits for 2030 and 2040 by December 31, 2020 and December 31, 2030, respectively. Executive Order at 2. Furthermore, Section 5 of the Executive Order states that its provisions shall be reviewed no later than December 31, 2019 and every five years thereafter. Id. at 5.

Based on the timelines set out in the GWSA and the Executive Order, it appears clear that the DEP's regulations should include emissions caps for 2018 through 2020, with a review of the regulations and the associated emissions caps undertaken in 2020. During the 2020 review, the LDCs will be able to provide additional data regarding growth projections and the implementation of the GSEPs during their initial five years, which will allow for greater accuracy in determining progress towards reducing GHG emissions consistent with the GWSA.

The draft regulatory text circulated by the DEP on November 7, 2016 included the provision for the calculation of emissions caps through 2034 and 2038, depending on the length of an LDC's GSEP. Developing the caps so far into the future without any data supporting the cap calculation is of concern given that the LDCs will continue to gather information on growth and GSEP implementation throughout this period. Additionally, calculating the caps through 2034 and 2038 assumes that the GSEPs will not be updated or revised, pursuant to Department authorization, to reflect the impact of factors such as contractor availability, weather, etc. Given that the LDCs have only recently begun implementing their GSEPs, it is unknown whether and when such updates or revisions would be undertaken to ensure the continued acceleration of leak-prone infrastructure.

In order to avoid a potential situation where the calculated cap is not reflective of actual circumstances, the LDCs suggest calculating the cap through 2020, pursuant to Section 16 of the GWSA, and revisiting the cap calculation and underlying data during 2020 for future implementation. This recalibration is consistent with the mandates of the GWSA that require the DEP to develop regulations that ensure the rigorous and consistent accounting of emissions. G.L. c. 21N, § 2(a)(6). The required rigor and consistency will necessarily flow from the use of accurate information reflecting actual growth circumstances and GSEP implementation.

IV. CONCLUSION

The LDCs acknowledge the DEP's careful and deliberate manner in approaching the development of regulations for the reduction of emissions from natural gas distribution systems consistent with the provisions and directives of the GWSA, the Supreme Judicial Court's decision in Kain and Executive Order 569. The LDCs appreciate the opportunity to file these initial comments during the DEP's rulemaking proceeding and provide industry insight and expertise in order to assist in the development of fair and effective regulations. The LDCs' recommendations outlined in these initial comments will aid in the development on regulations that appropriately balance the LDCs' competing obligations related to safety and reliability, their authorization to facilitate access to natural gas and reduce GHG emissions from their individual distribution systems. The LDCs look forward to continuing to participate in the DEP's rulemaking.

Respectfully submitted,
Boston Gas Company NSTAR Gas Company d/b/a
and Colonial Gas Company Eversource Energy
each d/b/a National Grid

By their Attorney, By its Attorney,

_____ _____

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The Berkshire Gas Company Bay State Gas Company d/b/a Columbia Gas of Massachusetts

By its Attorney, By its Attorney,

/s/ James M. Avery /s/ Shaela McNulty Collins

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Liberty Utilities (New England Natural Gas Company) Corp. d/b/a Liberty Utilities Fitchburg Gas and Electric Light Company d/b/a Unitil

By its Attorney, By its Attorney,

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Dated: November 16, 2016

APPENDIX A
PROJECTED GROWTH RATES

Bay State Gas Company d/b/a Columbia Gas of Massachusetts

Year	Main (feet)	Services
2017	224,025	4,375
2018	229,528	4,485
2019	235,719	4,609
2020	246,725	4,829
2021	254,979	4,994

Berkshire Gas Company

Year	Main (feet)	Services
2016	6,000	400
2017	6,000	400
2018	6,000	400
2019	6,000	400
2020	6,000	400

Boston Gas Company and Colonial Gas Company each d/b/a National Grid

Services:

Customer Type	FY12	FY13	FY14	FY15	FY 16	FY 17	FY 18
Residential	6,102	6,730	7,410	6,911	6,356	4,345	4,767
Commercial	700	568	683	598 (included above)		422 (included above)	

Main (in feet):

Customer Type	FY12	FY13	FY14	FY15	FY16	FY17	FY 18
Residential	103,917	97,198	114,707	157,911	151,000	161,503	160,000
Commercial	56,190	59,054	45,278	39,027 (Included above)		(Included above)	(Included above)

National Grid plans to add approximately 5 to 6 percent to the services and main installations year over year through FY20.

APPENDIX A
PROJECTED GROWTH RATES

Fitchburg Gas and Electric Light Company d/b/a Unitil

Year	Main (feet)	Services
2016	6,500	120
2017	6,500	120
2018	6,500	120
2019	6,500	120
2020	6,500	120

Liberty Utilities (New England Natural Gas Company) Corp. d/b/a Liberty Utilities

Year	Main (feet)	Services
2016	21,500	367
2017	22,980	383
2018	24,000	400
2019	25,380	423
2020	27,000	450

NSTAR Gas Company d/b/a Eversource Energy

NSTAR Gas Company d/b/a Eversource Energy

Year	Main (feet)	Services
2016	108,000	2,300
2017	150,000	2,800
2018	165,000	3,000
2019	180,000	3,400
2020	200,000	3,700

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Q1: **First Name (optional)**	Graham
Q2: **Last Name (optional)**	Noyes
Q3: **Company or Organization - if applicable (optional)**	Low Carbon Fuels Coalition
Q8: **Which emission source(s) does your comment address**	Transportation, Land Use & Smart Growth

Q9: **Please type your comment below.**

Background

The Low Carbon Fuels Coalition (Coalition) appreciates the opportunity to submit comments on the Department of Environmental Protection's (DEP) development of regulations to reduce greenhouse gas (GHG) emissions under Section 3(d) of the Global Warming Solutions Act (GWSA). The Coalition represents a broad range of clean energy companies including producers and developers of biodiesel, ethanol, renewable natural gas, waste-derived fuels, and other low carbon fuel industry participants. The Low Carbon Fuels Coalition tracks regulations and legislation, advocates for policies that benefit the entire low carbon fuels industry, and facilitates industry success through consensus and coalition building.

The Commonwealth has determined that climate change presents a serious threat to the environment, and to the citizens, communities and economy of Massachusetts. The Coalition recognizes the state's policy leadership in this area, and the re-affirmation of this leadership as reflected by Governor Charles D. Baker's recent Executive Order 569, "Establishing an Integrated Climate Change Strategy for the Commonwealth." (EO) In particular, the Coalition appreciates the significance of Massachusetts' binding limit of a 25% GHG reduction below 1990 levels by 2020 (Binding GHG Limit).

As stated in Governor Baker's EO, the transportation sector continues to be a significant contributor to GHG emissions, and is the only sector identified in the GWSA with a volumetric increase in GHG emissions. As provided by Section 2 of the EO, DEP shall promulgate final regulations that "satisfy the mandate of Section 3(d) of Chapter 21N of the General Laws by August 11, 2017,..." and, "revise the Global Warming Solutions Act requirements for the Massachusetts Department of Transportation set forth in 310 C.M.R. 60.05 to establish declining annual aggregate emissions limits…"

Recommendation

To enable the achievement of the state's forthcoming Binding GHG Limit in the transportation sector, the Coalition

strongly recommends that DEQ consider the establishment of a statewide low carbon fuel standard. The Coalition recommends that the consideration of a low carbon fuel standard be immediately added to this rulemaking, not as an alternative to any of the existing policy proposals but as a complementary policy mechanism.

The key benefits of a low carbon fuel standard are that it is a technology-neutral, market-based policy that does not require any significant expenditure of state funds. The pace of GHG reductions in the transportation sector can be tailored to the state's requirements, and the availability of low carbon fuels. Experience in California over the past six years has proven that a low carbon fuel standard is a uniquely effective policy mechanism that enables incremental GHG reductions across all transportation fuels. The remainder of this comment provides further detail regarding the nature and benefits of California's program as a program example for DEQ to consider.

Summary of California's Low Carbon Fuel Standard Program

California's Global Warming Solutions Act of 2006 (AB 32) established California's goal of reducing its greenhouse gas (GHG) emissions to 1990 levels by 2020. The statute charged the California Air Resources Board (CARB) with developing and implementing regulations in multiple sectors to achieve that goal. In January 2007, then Gov. Arnold Schwarzenegger issued Executive Order S-01- 07 calling on CARB to determine whether a low carbon fuel standard (LCFS) could be adopted under AB 32 to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020.

In April 2010, CARB adopted regulations now found at Cal. Code Regs. tit. 17, §§ 95480-95497. The LCFS applies to transportation fuels that are "sold, supplied, or offered for sale in California" and "any person who as a regulated party… is responsible for a transportation fuel in a calendar year." The LCFS applies to a wide range of transportation fuels and technologies including gasoline, diesel, biodiesel and ethanol fuels.

The LCFS reduces GHG emissions by regulating the full life-cycle carbon intensity (CI) of transportation fuels used in California. The CI score of a fuel reflects not only GHG emissions created at the time of combustion, but also the GHG emissions associated with its production, its transport to California, and any indirect land use change attributed to the feedstock used to produce the fuel. Petroleum refiners and importers must meet an annual standard for CI, which decreases more rapidly in the later years of the program. The decreasing CI requirements and the ability to bank LCFS credits has created a significant market for LCFS credits and increased the demand for low carbon intensity fuels. The LCFS is a market-based program that relies on market participants, and does not require annual appropriations. The program is widely regarded as the most effective program structure ever developed for reducing the carbon intensity of transportation funds.

GHG Reductions and Other Benefits Delivered by California's LCFS

Since its inception in 2011, the LCFS has reduced GHG pollution by 16.6 million tons, more than 7.4 million tons more than the LCFS requires due to early compliance. (UC Davis Institute of Transportation Studies, Status Review of California's Low Carbon Fuel Standard, May 2016, https://its.ucdavis.edu/californias-low-carbon-fuel-standard/)

The GHG reductions achieved to date by the LCFS equate to taking 3.5 million cars off the road for one year.

The LCFS has generated $650 million in investment for clean fuel production and supported more than 20 in-state biofuel manufacturing facilities. (Environmental Defense Fund, American Lung Association and Tetra Tech, Driving California Forward: Public Health and Societal Economic Benefits of California's AB 32 Transportation and Fuel Policies, 2014, https://www.edf.org/sites/default/files/content/edf_driving_california_forward.pdf) (Driving California Forward Report).

To date, the LCFS has increased clean, alternative fuel use by 36 percent. (California Delivers, Low Carbon Fuel Standard, http://www.cadelivers.org/low-carbon-fuel-standard)

The LCFS together with cap and trade has saved $1.6 billion in avoided public health impacts from toxic air pollution, and will generate more than $10 billion in overall health and societal benefits by 2020 with the LCFS providing the large majority of the benefits. (Driving California Forward Report; and, ICF International, Consumer Impacts of California's Low-Carbon Transportation Policies, March 2016, http://consumersunion.org/wp-content/uploads/2016/03/Consumer-Impacts-of-Low-Carbon-Transportation-Policies-Report.pdf)

Clean transportation was the best performing sector for venture capital investment in California in 2015, totaling $3.4 billion. This represents over 90% of venture capital investment in the nation. (Next10, California Green Innovation Index, July 2016, http://next10.org/2016-gii)

Conclusion

In addition to California, Oregon and British Columbia have adopted similar low carbon fuel policies and are beginning to receive benefits. Please let me know if further information would be helpful now or in the future.

Thank you for the opportunity to provide input to this proceeding.

#82

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Q1: **First Name (optional)**	Launa
Q2: **Last Name (optional)**	Zimmaro
Q3: **Company or Organization - if applicable (optional)**	*Respondent skipped this question*
Q8: **Which emission source(s) does your comment address**	Natural Gas Distribution System Leaks , Transportation, Land Use & Smart Growth

Q9: **Please type your comment below.**

A correction to previous comment, excerpted below. Please note that "MassDOT" should be changed to MassPort in reference to the planned parking facility:

". . . My next comment regards the role of the MassDOT in the monumental challenge of reducing emissions. Transportation is the largest source of GHG emissions in the Commonwealth. I've heard that the MassDOT is planning on construction of a 5200 car parking lot. How does such a plan relate to efforts to reduce emissions? In order to truly succeed in the vital effort to reduce GHG emissions, various departments of our government need to work together on an integrated approach, with each accountable for progress in achieving the shared goal of the mandate. Integrating efforts across departments applies to all departments, but is particularly pertinent in terms of the Department of Transportation, given the role of transportation emissions in Mass."

Additinoally, supporting a transition to EVs would prove a significant factor in emissions' reduction. I urge the Administration to: 1) convert its vehicle fleet to hybrids or EVs and set an emissions cap of 0 by 2020 for passenger vehicles in the fleet; 2) take steps to help cities convert to electric buses; 3) set a requirement that ride-sharing services contracted by the state be with EVs only. As part of integrated planning, state should develop a plan to accelerate installation of EV charging infrastructure.

Thank you for your attention to and consideration of my comments.

#83

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Q1: **First Name (optional)**	Miriam
Q2: **Last Name (optional)**	Posner
Q3: **Company or Organization - if applicable (optional)**	A Better City
Q8: **Which emission source(s) does your comment address**	Transportation, Land Use & Smart Growth

Q9: **Please type your comment below.**

A Better City is a diverse group of business leaders united around a common goal — to enhance Boston and the region's economic health, competitiveness, vibrancy, sustainability and quality of life. With 130 member companies across multiple sectors, A Better City operates between the private and public sectors using technical expertise and research capabilities to shape key policies, projects and initiatives. By amplifying the voice of the business community through collaboration and consensus across a broad range of stakeholders, A Better City develops solutions and influences policy in three critical areas central to the Boston region's economic competitiveness and growth — transportation and infrastructure, land use and development, and environment and energy.

The Massachusetts Department of Environmental Protection (DEP) should work to promulgate regulations with enough specificity and commitment to ensure the Commonwealth achieves its mandates. The integration of legally-binding declining volumetric annual aggregate greenhouse gas emission limits (into the 301 CMR 60.05 regulations) for the transportation sector is particularly vital. A Better City supports the efforts of the Commonwealth to track, monitor, and certify emissions reductions across the transportation sector. Specifically, valid and verifiable requirements are vital for the Commonwealth to reach the goals necessary to mitigate climate change.

Additionally, though the Governor's Executive Order 569 calls for the DEP to set these annual declining emissions limits to reach the Commonwealth's 2020 goals, these regulations (and the administration's activities broadly) should be thinking beyond 2020, to 2030, 2040, and 2050. The E.O. calls for the DEP to set statewide goals for 2030 and 2040, but not specifically to promulgate regulations for particular sectors. To minimize the need for continual regulatory updates, the Commonwealth should consider setting targets that would carry us through 2020 and beyond.

Finally, while setting the declining annual targets is a vital component to combating climate change, the state must also put into place targeted and salient policies and programs to enable public and private institutions, as well as private citizens, to reduce their emissions. Some useful policies—like the state's 2012 Mode Shift Goal of tripling the share of travel in Massachusetts by bicycling, transit and walking—have been abandoned but revitalizing them could greatly support the greenhouse gas reduction targets. A Better City and its partners are committed to supporting the development of new and restored state policies and programs to ensure these goals are met for 2020 and beyond.

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Q1: **First Name (optional)**	Carol
Q2: **Last Name (optional)**	Saunders Chamberlain
Q3: **Company or Organization - if applicable (optional)**	Mothers Out Front
Q8: **Which emission source(s) does your comment address**	Building Fuels & Energy Efficiency , Electricity Generation & Distribution , Natural Gas Distribution System Leaks

Q9: **Please type your comment below.**

As a citizen and even more as a mother, I am deeply concerned about climate change. I want a livable climate for all our children and all children yet to come.

As you craft regulations to help ensure that Massachusetts reaches its goals under the GWSA, please keep in mind that increased energy efficiency, solar and wind are by far the safest, cleanest, and most renewable energy sources. If Massachusetts requires (and subsidizes where necessary) more and more energy efficiency and more and more additional class I wind and solar produced energy, and storage mechanisms for that energy, this will benefit our regional economy as well as our health and our climate.

Mass DEP must do everything possible to demand the utilities fix gas leaks AND stop the construction of new infrastructure for fossil fuels. This includes "natural" gas pipelines. These pipelines will be carrying fracked gas, at increased pressures, and will set the stage
for extraction of millions of gallons of gas for export, poisoning soil, water air and speeding climate change. We must take a stand to stop gas leaks today and pipelines tomorrow and in the future.

Also, studies done at BU and Harvard have discovered many more gas leaks than have been reported by the gas utilities. One study estimates that there are 1.7 times as many gas leaks as have been reported by the utilities. In light of this, and since consumers are paying for lost gas, we can't trust the utilities to take care of this problem themselves. They need oversight and verification from outside sources.

Thank you for all your hard work on this issue. Remember you have lots of regular citizens supporting your best efforts to solve these problems!

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Q1: First Name (optional)	Daniel
Q2: Last Name (optional)	Gatti
Q3: Company or Organization - if applicable (optional)	Union of Concerned Scientists
Q8: Which emission source(s) does your comment address	Transportation, Land Use & Smart Growth

Q9: Please type your comment below.

My name is Daniel Gatti, and I am a policy analyst with the Clean Vehicles program at the Union of Concerned Scientists. My work focuses on reducing emissions from transportation in Northeast states.

About us
The Union of Concerned Scientists (UCS) puts rigorous, independent science to work to solve our planet's most pressing problems. We seek to limit the impacts of climate change, accelerate the transformation to a clean energy economy, advance the production of sustainable and healthy food, reduce the risk of nuclear disaster, and highlight the central role of science to a thriving democracy.

Reducing emissions from transportation
Under the Global Warming Solutions Act, Massachusetts has committed to some of the strongest climate mandates in the country – limits in line with what leading scientific estimates indicate is necessary to protect our climate and future generations from catastrophic levels of global warming.
Making those reductions happen will be challenging, and will require major reductions in our use of oil in the transportation sector. Transportation is the largest source of emissions in Massachusetts, and it's the only sector where emissions are actually greater today than in 1990. As the state considers new limits on emission sources under 3(d) of the GWSA, transportation stands out as a critical area with a clear need for additional policies to stabilize and reduce emissions.
In addition to the central role transportation will play in achieving our climate limits, reducing oil use in the transportation sector will mean a stronger and more resilient economy, improved public health, and reduced costs for consumers.

Half the oil vision
In 2012, the Union of Concerned Scientists unveiled a practical plan to cut projected U.S. oil use in half by 2035 through improvements in vehicle efficiency, accelerating the use of innovative clean fuels and investing in clean transportation.
As our report shows, the technologies that are necessary to achieve major reductions in oil use are ready to go. The question is whether the political system can put the policies together that will enable these technologies to achieve their full potential.
What do we need to get there?
- We need to increase the efficiency of our vehicles, from passenger vehicles to trucks to planes and ships. While this is largely a matter of federal policy, leading edge states like Massachusetts continue to play a critical role driving the federal fuel efficiency conversation towards higher efficiency standards. Given the critical role that federal fuel efficiency rules play in achieving our GWSA mandates, and given the new administration in Washington, DEP officials should remain engaged with federal policymakers as they consider changes to the program.
- We need to deploy innovative new technologies such as electric vehicles and advanced biofuels. Electric vehicles represent the most promising technology ever developed to eliminate our use of oil. Today's electric vehicles are powerful cars that can meet the driving needs of today's consumers while producing far fewer emissions. On average, an EV driver in Massachusetts gets the gasoline equivalent of 75 miles to the gallon, and a car owner in Boston can save up to $950 per year in reduced fuel costs by purchasing an electric vehicle instead of a gasoline-powered vehicle . Nevertheless, there are significant barriers to widespread adoption of electric vehicles that can be addressed through policy. The high up-front cost of electric vehicles can be prohibitive for middle class families. Infrastructure remains a significant obstacle, especially for people living in multi-unit dwellings or who rely on street parking. We encourage DEP to work with the Department of Transportation and the Department of Public Utilities to expand programs that will build charging infrastructure and make electric vehicles more affordable and accessible.
The state can help lead the way by upgrading state fleets to electric vehicles where appropriate. Recent legislation passed by the Senate would have required the state to increase the number of electric vehicles in their fleet rising to 25

percent of all vehicles by 2025.
A good place to start would be electrification of transit buses. Last week, UCS along with our partners at the Greenlining Institute released a study on electrification of heavy-duty vehicles. These large vehicles represent a small percentage of vehicles on the road but a major contributor to particulate matter pollution and other emissions associated with health problems in our cities. Our report found that battery electric buses produce 75 percent fewer emissions than diesel or natural gas vehicles, along with greatly reduced emissions of particulate matter and nitrous oxide. Investments in electric buses will also create long term cost savings for the Department of Transportation.
- We need to reduce the need to drive by investing in public transportation and bike and pedestrian infrastructure, as well as affordable housing in areas close to transit. In addition, the state should think carefully about new mobility choices, such as automated vehicles and car sharing networks, to ensure that these important innovations are implemented in a manner consistent with our climate mandates.

Market-based policy
Finally, Massachusetts should consider a market-based policy to reduce transportation emissions.
The most straightforward approach to addressing the Supreme Judicial Court's demand for mandatory, enforceable, volumetric declining annual aggregate emissions limits would be through a market based program that sets a cap on transportation emissions and requires transportation fuel distributors to purchase allowances based on their total emissions.This strategy is clearly authorized by the express text of the Global Warming Solutions Act. Section 7(a) of the GWSA states that the Secretary of the Department of Environmental Protection "may consider the use of market-based compliance mechanisms to address climate change concerns". The statute further defines market-based compliance mechanisms as "a system of market-based declining annual aggregate emissions limitations for sources or categories of sources that emit greenhouse gases."
A market-based program would hold transportation fuel distributors accountable for their emissions and create an incentive to shift towards cleaner fuels, while at the same time providing a funding source for investments in clean transportation that will save consumers money and reduce our use of oil.
Such a program would build on the successful model of the Regional Greenhouse Gas Initiative, the market-based program that currently limits emissions within the electric sector. Independent macroeconomic analysis shows that since 2008 RGGI has increased economic growth by $2.9 billion, created 28,000 jobs and produced over $1.5 billion in consumer savings in the region .
There is no reason why our climate policy should hold utilities accountable for their emissions while letting oil companies pollute for free, especially in an era where we are trying to encourage the electrification of transportation. The Georgetown Transportation and Climate Initiative has shown that a market-based system that covers transportation fuels, when combined with existing state and federal policies and a clean fuel standard, could help reduce transportation emissions by 40%, save consumers up to $72 billion and create over 90,000 jobs in the Northeast region by 2030 .
The alternative approach would have the state package together rate-based emission reductions with other programs the state is already working on to reduce transportation emissions, and based on those programs project the remaining quantity of emissions in 2018, 2019 and 2020 expressed in MMTCO2E, and call these projections "caps". The state would then promise that if overall emissions exceed those caps, then alternative compliance mechanisms would kick in that would achieve equivalent reductions.
It will be challenging for the state to design these caps in a way that actually make the emissions reductions mandatory and enforceable as required by the Supreme Judicial Court. For example, if total Vehicles Miles Travelled (VMT) continues to rise beyond expected levels, or if higher than anticipated SUV sales limit the gains from the fuel efficiency program, then transportation emissions could vastly exceed projected caps beyond the ability of alternative compliance mechanisms to remedy.
Let me conclude by thanking you all for conducting this process, and express my appreciation to the administration for their increased focus on transportation emissions. Achieving large reductions in transportation emissions will be challenging, and will require sustained engagement, bold leadership, and ultimately significant resources. But with the right commitment and the right set of policies we can put this state on the path to a clean transportation system, and the result will be not only that we meet our climate mandates, but also a stronger economy, improved public health, and a more equitable society.

#86

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Q1: First Name (optional)	Stephen
Q2: Last Name (optional)	Zemba
Q3: Company or Organization - if applicable (optional)	*Respondent skipped this question*
Q8: Which emission source(s) does your comment address	Natural Gas Distribution System Leaks

Q9: Please type your comment below.

I write to comment on the impending regulations that the Massachusetts Department of Environmental Protection (DEP) is about to issue in draft form pursuant to the Global Warming Solutions Act (GWSA) and Executive Order 569. One of the areas to be potentially regulated is the natural gas distribution system. DEP materials on this topic, specifically "Slide Set 6", indicate that targeting methane leaks from the gas distribution may reduce greenhouse gas emissions by 0.05% over the period from 2013 to 2020. Compared with other priorities, this seems like a very minor reduction relative to other sources, and perhaps not worthy of considerable attention from DEP – at least not from the perspective of prioritizing focus on greenhouse gas emission reductions. Thus, as my overall question/comment:

Are regulations on these sources necessary under the GWSA?

Some additional questions and comments on the gas distribution system area:

• How is the 0.05% reduction estimate derived? DEP should provide the specific assumptions and calculations for peer review.
• Assuming that the 0.05% reduction estimate is reasonably accurate, creating emission caps and reporting requirements for the individual gas companies, making these companies track and report emissions each year, and overseeing this process will involve a great deal of effort and resources for very little gain.
• Table 9 of the materials provided by DEP contains a series of undocumented methane emission factors. DEP should provide the reference or justification for these emission factors. The large differences in the emission factors indicate that certain technologies and pipe materials are superior for reducing methane emissions. An alternate plan to the proposed 310 CMR 7.73 regulation might be to require the gas companies to replace aging/broken pipes according to a required schedule and/or level of annual investment.
• Other comments submitted to DEP indicate public concerns over gas leaks and odors that are unrelated to greenhouse gas emissions. Repairing and replacing mains and services may be useful to respond to public concerns, but placing this regulation under the GWSA makes little sense.

#87

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Q1: **First Name (optional)**	Leann
Q2: **Last Name (optional)**	Canty
Q3: **Company or Organization - if applicable (optional)**	Mothers Out Front
Q8: **Which emission source(s) does your comment address**	Natural Gas Distribution System Leaks

Q9: **Please type your comment below.**

I send these comments as a citizen of the Commonwealth, a primary care physician caring for 1,500+ Massachusetts residents and most importantly as the mother of two children. I thank you for your work to preserve a clean and healthy environment in the Commonwealth.
As you work to reduce greenhouse emissions, I urge you to consider that global warming is an enormous threat not only to the Commonwealth and of course the entire world. I urge you to continue the leadership role that Massachusetts in reducing greenhouse emissions. Along with states like California and New York we must push what is possible at the state level and show it can be done since we now have little reason for hope of productive action at the federal level. The current work to draft regulations in support of Executive Order 569 is a profound opportunity to act.

One of the most immediate steps that we can take to reduce out contribution to carbon emissions in the Commonwealth is to fix our leaking infrastructure that transmits methane gas. In order to help accomplish this, I would request that you:

Source an independent monitor for methane gas emissions from gas pipes. Do not accept the utilities own reporting of the leaks and their repairs. Their data has consistently underestimated emissions and overestimated the success of repairs and is not to be trusted
Please follow the expert advice of the Boston University researchers in this matter, and please make the data transparent and easily accessible. Without such empirical data about actual numbers of leaks, and their volume, assumptions based on utility reporting could be underestimates by an order of magnitude or more.

I also urge you to push for accelerated leak repair with a priority on super emitters. It has been shown in other states that when utilities are truly held accountable and forced to take on the cost of lost gas that they can respond to the problem much more rapidly then they claim..
.

We must take a bold stand, back it up and make it so. In addition to fixing leaking gas pipes, I would urge that we now move as rapidly as possible to fossil free sources of energy for all uses. We must not invest in any new infrastructure for fossil fuels from this point forward. I ask that you do this with all haste and force on behalf of all of our children. .

#88

PAGE 1

Q1: **First Name (optional)**	Ellen
Q2: **Last Name (optional)**	Curran
Q3: **Company or Organization - if applicable (optional)**	*Respondent skipped this question*
Q8: **Which emission source(s) does your comment address**	Other (please specify) preventing the building of additional gas pipeline , encourage expansion of green renewable energy.

Q9: **Please type your comment below.**

The Medway Exelon gas plant expansion is not in alignment with the GWSA goals.
We are not on track with the GWSA goals. The DEP needs to create specific plans and implement the plans to ensure that regulations are created that will get us to the goal of being 20% below the levels of 1990 by 2020.

#89

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Q1: **First Name (optional)**	john
Q2: **Last Name (optional)**	mcadam
Q3: **Company or Organization - if applicable (optional)**	Citizen

Q8: Which emission source(s) does your comment address	Building Fuels & Energy Efficiency , Electricity Generation & Distribution , Natural Gas Distribution System Leaks , Transportation, Land Use & Smart Growth , Sulfur Hexafluoride (SF6) Leaks from the Electric Distribution System

Q9: Please type your comment below.

Dear DEP,

Thank you for hosting public comments. I have a few points.

The Executive Order is an important and welcome first step. We appreciate it. The Governor has reaffirmed that climate change is a serious threat and that the Administration intends to meet the requirements of the GWSA.

That said, the Executive Order is not enough. Right now, we are not on track to hit the 2020 emissions reductions mandated by the GWSA. The Global Warming Solutions Act targets are not aspirational. They are legally required. The Supreme Judicial Court has ruled that the state has an obligation to put regulations in place that ensure we close the gap and achieve compliance by 2020.

We need specific plans and accurate accounting to ensure that the regulations created by the DEP get us to 25% below 1990 levels by 2020.

The current Clean Energy and Climate Plan (CECP) includes many key policies/programs intended to achieve compliance, but we are lagging in meeting 2020 targets and in implementing many of the measures contained in the plan.

Similarly, the new clean energy procurements included in the omnibus bill (hydro and offshore wind) are critical to helping MA transition to clean energy over the coming decades. But because those resources will not come online until after 2020, they will not help us meet the GWSA requirements.

Carbon pollution fee-and-rebate: A study done for DOER in 2014 demonstrated that it is feasible to implement a carbon pricing system in Massachusetts, and that if most or all of the revenues are returned to the public through rebates, there will be positive economic impacts on the state as a whole, on low- and moderate-income households, and on a large majority of business sectors. This policy would require legislation, and could only be in operation for a couple of years by 2020, so its impacts by then would be limited, but it could yield reductions of several hundred thousand MMTCO2e in 2020

Energy efficiency: we've made great gains with EE, but we could be doing much more, in ways that would be much less expensive than building out new gas infrastructure. Right now, the utilities are not doing everything they could be on energy efficiency. The utilities should be required to capture all efficiency and demand reduction resources that are cost-effective or less expensive than new supply. The administration could push the utilities through a number of channels, including DOER and the Energy Efficiency Advisory Council (EEAC).

Make municipal utilities comply with the Renewable Portfolio Standards and the energy efficiency requirements that apply to other utilities.

Clean Energy Standard – consider a Clean Energy Standard that is specifically tailored to promote clean energy solutions. For instance, a Clean Energy Standard could incentivize storage, the adoption of renewables beyond what is currently required by RPS, and/or the use of energy efficiency above and beyond existing three-year-plan goals.

Gas leaks: Fix the distribution system! Fix the super emitters! The Department of Environmental Protection should issue regulations that extend beyond 2020 on methane emissions to ensure continued reduction. DEP should also partner with independent researchers to help define "leaks of significant environmental impact."

New gas infrastructure: The administration should factor GWSA impacts into decision making related to siting of new generation facilities and pipelines. Continuing to pursue new gas infrastructure is at odds with our need to comply with the GWSA.

Transportation: There are a number of steps that would reduce transportation emissions, most of which fall under the purview of the Department of Transportation. Possibilities include: pay-as-you-drive insurance (a pilot program on this was recently dropped), encouraging municipalities and Regional Transit Authorities to purchase EVs, creating EV charging stations, adjusting the sales tax for new car purchases based on fuel efficiency, and driver education programs.

#90

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Q1: **First Name (optional)**	Sheila
Q2: **Last Name (optional)**	Harbst
Q3: **Company or Organization - if applicable (optional)**	*Respondent skipped this question*
Q8: **Which emission source(s) does your comment address**	Natural Gas Distribution System Leaks

Q9: **Please type your comment below.**

I urge Governor Baker and the DEP to meet the Global Warming Solutions Act greenhouse emissions by 2020. The DEP has a legal obligation, as stated by the MA Supreme Judicial Court, to reduce emissions by 25% by 2020. To meet the GWSA greenhouse emissions, MA needs specific plans and accurate accounting to ensure that the regulations created by the DEP get us to 25% below 1990 levels by 2020. Without implementation and commitment to specific plans to reduce greenhouse emissions MA cannot meet the 2020 targets required to meet the GWSA.

I urge Governor Baker and the DEP to stop the building of natural gas infrastructure because doing so does not get MA closer to meeting the requirements of the GWSA. Instead of building new gas pipelines MA must (a) direct funds to offshore wind and hydro energy sources; and (b) require utilities to repair existing gas transmission line leaks.

I urge the Governor and Department of Environmental Protection to issue regulations that extend beyond 2020 on methane emissions to ensure continued reduction. DEP should also partner with independent researchers to help define “leaks of significant environmental impact.”

Personally, I like living on land and breathing air. I can only hope that MA will do its part to allow myself and all future generations to do just that. The time for action is now.

Please stop the building of natural gas pipelines. Don't allow the greed of a few to sacrifice the lives of all of us, now and in the future.

Regards,

#91

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Q1: First Name (optional)	Rand
Q2: Last Name (optional)	Barthel
Q3: Company or Organization - if applicable (optional)	*Respondent skipped this question*
Q8: Which emission source(s) does your comment address	Electricity Generation & Distribution , Natural Gas Distribution System Leaks , Other (please specify) New gas infrastructure

Q9: Please type your comment below.

I want to thank the Massachusetts DEP for requesting public feedback on the very important issue of how to get back into compliance with the Global Warming Solutions Act (GWSA) and stay in compliance with it through 2050. Here are my comments for your consideration:

1. The targets in the GWSA are not only a legal requirement: they are supported by climate science. The Intergovernmental Panel on Climate Change (IPCC) assessments of the state of climate science have for the last three years been saying that if we want to limit global warming to the 2 degrees C that was agreed upon in Paris in December 2015, there is a “carbon budget” of cumulative CO2 emissions that we must not exceed. The exact numbers vary with assumptions, but the conclusion is clear: we need to phase out most uses of carbon fuels by 2050 at the latest. The GWSA’s 2050 target of an 80% reduction in emissions over 1990 levels is thus not merely an arbitrary legal requirement set by a legislature, that could be changed by a legislature: the target represents (almost) Massachusetts’ share of what the whole world must do to prevent global warming from spiraling out of control .

2. We are currently not on track to meet the GWSA’s 2020 target of a 25% reduction in emissions over 1990. We need a specific plan to get back on track toward that goal.

3. We need a specific plan for the 2020-2050 period that has targets for the intervening years, perhaps every five years, and a procedure for assessing our progress and holding ourselves accountable for these targets. This planning needs to be done from the point of view that failure to meet the 2050 goal is not an option, because it isn’t.

4. The clean energy deployments included in the new omnibus energy bill (the hydro and large-scale offshore wind) are vital to success with GWSA. They can’t be counted against the 2020 target because they will come online later than that, but we need to make sure these deployments happen, especially the offshore wind. In fact, we should be planning to deploy far more offshore wind than the 1500 MW in the bill. This can become a major engine of economic growth for the South Coast area of the state.

5. Transitioning to clean energy while keeping the lights on needs to be understood as “Job 1” for the institutions that deal with energy in the state, including DEP, DOER, the DPU, and ISO New England. It may be necessary to change the laws that define the missions of these institutions to make sure they become part of the solution, not part of the problem.

6. New natural gas infrastructure, including new gas pipelines and new gas-fired power plants, are incompatible with GWSA. This includes the Spectra Atlantic Bridge and Access Northeast projects, and the Excelon power plant expansion in Medway. There is no hope of meeting the 2050 target, or any intermediate target in the 2020-2050 period that would be on a plausible path to the 2050 target, if we lock in a continued heavy dependence on natural gas to produce electricity. Expensive new natural gas infrastructure will become stranded assets if we really succeed in complying with the GWSA.

7. The DEP’s plan for GHG compliance with GWSA should recognize that methane (natural gas) leaked into the atmosphere is a far more potent greenhouse gas than CO2 (86 times more potent over 20 years according to widely accepted estimates). Therefore, aggressive repair of leaks should be undertaken, and the full GHG value of the gas saved should be recognized in the plan.

#92

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Q1: **First Name (optional)**	Carolyn
Q2: **Last Name (optional)**	Barthel
Q3: **Company or Organization - if applicable (optional)**	*Respondent skipped this question*
Q8: **Which emission source(s) does your comment address**	Building Fuels & Energy Efficiency , Electricity Generation & Distribution , Natural Gas Distribution System Leaks , Transportation, Land Use & Smart Growth , Other (please specify) Gas infrastructure, Carbon Pollution Pricing, Municipal Utilities, Solar, Offshore Wind

Q9: **Please type your comment below.**

Governor Baker's Executive Order demonstrates that our governor takes the climate crisis seriously and intends to abide by the Global Warming Solutions Act's legal requirements. However, at our current carbon use, the state will not meet the 2020 carbon emission reductions, so we must take significant measures now to do so. Thank you for this opportunity for public feedback.

The 80% reductions for 2050 are pretty good and were a reasonable estimate back when the law was created, but now, eight years later, we know from the climate science that 100% reductions by 2050 is what is really necessary for us to live on a habitable planet. With that information in mind, we must SIGNIFICANTLY EXCEED the minimum requirements for 2020 and the yearly reductions up to 2050.

BUILDING FUELS AND AND ENERGY EFFICIENCY
We've made good strides with energy efficiency but we could accomplish so much more. I read that, over the last several years, we've improved our EE by 20-25%, so that means we have another 80% to go. The utilities should capture all efficiency. All conservation measures whose unit cost is less than the cost of new supply should be implemented before building new supply. We must get off fossil fuel building fuels—gas, propane, and oil—and switch to heat pumps and geothermal; the state should provide strong incentives to encourage the switch.

ELECTRICITY GENERATION AND DISTRIBUTION
We must keep electricity generation and distribution separate; otherwise, there is too much opportunity for corruption and price-gouging. The grid should be decentralized as much as possible, making power outages more limited and local. We should take note of what changes the state of New York is making that look reasonable.

NATURAL GAS DISTRIBUTION SYSTEM LEAKS
Fix ALL the leaks! Not only are the ratepayers unfairly shouldering the financial burden imposed by National Grid and Eversource for gas they never used, the gas is also escaping unburned into the atmosphere. Fix the super emitter leaks. The DEP should issue regulations beyond 2020 on methane emissions to continue reductions. The DEP should also work with independent researchers to help define “leaks of significant environmental impact.”

TRANSPORTATION, LAND USE AND SMART GROWTH
One of the more challenging methods of carbon emission reductions is transportation which would come under the Department of Transportation's purview. The DOT needs to get involved in carbon reductions as well! Possible options are pay-as-you-drive insurance, encouraging municipalities and Regional Transit Authorities to purchase EVs, creating EV charging stations, adjusting the sales tax for new car purchases based on fuel efficiency, and drive education programs. This fall Germany voted to ban gas and diesel-powered cars by 2030. We can do that, too, although it won't help us reach the more immediate 2020 reductions. A renovated, more efficient MBTA system is vital but will take a long time to implement.

GAS INFRASTRUCTURE
The state cannot continue to build new gas infrastructure and comply with the GWSA requirements. Several gas projects—Spectra Atlantic Bridge, Spectra Access Northeast and the Connecticut Expansion, and the Exelon power plant in Medway (EFSB tentatively approved)—should not be built. If we build more gas infrastructure, it will swallow up our whole carbon budget by 2050. Likewise, existing gas infrastructure needs to be phased out completely by 2050.

CARBON POLLUTION PRICING
In 2014 a DOER study showed the feasibility of a carbon pricing system in Massachusetts. If most or all of the revenues are returned to the public through rebates, the net result would be a positive impact as a whole, on low- and moderate-income households, and on a sizable majority of business. Obviously legislation is required, providing limited effect before 2020, but it could create reductions of several thousand MMTCO2e in 2020.

MUNICIPAL UTILITIES
The municipal utilities must comply with Renewable Portfolio Standards, whatever the legislature dictates, and they should also be required to adhere to the same energy efficiency standards for National Grid and Eversource.

SOLAR
Right now we are killing the solar industry in our state. We must immediately raise the solar cap to keep solar expanding in the state for all uses—business, homeowners, low- and middle-income, solar farms, towns and cities, and community solar (and any other use I haven't thought of). We must find incentives for landlords to be encouraged to provide solar for their tenants. We must create a fair incentive structure for the various needs.

OFFSHORE WIND
We must expand tremendously from the initial deployment of offshore wind in the energy omnibus bill. Unfortunately, the implementation of offshore wind can't count towards the 2020 GWSA goals. However, the Stanford study suggests that offshore wind could potentially provide 51% of the state's energy needs. Let's move in that direction!

#93

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Q1: **First Name (optional)**	Carolyn
Q2: **Last Name (optional)**	Barthel
Q3: **Company or Organization - if applicable (optional)**	*Respondent skipped this question*
Q8: **Which emission source(s) does your comment address**	Electricity Generation & Distribution

Q9: Please type your comment below.

I've just received a Utility Dive article about the latest development of NY's REV program, "How Do You Value DERs? New York PSC Staff Rolls Out New Pricing Scheme for REV." I've included a link:

http://www.utilitydive.com/news/how-do-you-value-ders-new-york-psc-staff-rolls-out-new-pricing-scheme-for/430193/

#94

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Q1: First Name (optional)	larry
Q2: Last Name (optional)	minear
Q3: Company or Organization - if applicable (optional)	na
Q8: Which emission source(s) does your comment address	Other (please specify) nuclear

Q9: Please type your comment below.

Supporting a plan to ensure adequate supplies of energy is a no-brainer. However, to include nuclear energy in the calculation makes no sense. Nuclear energy has many costs, hidden and apparent, long-term and short-term. Mass DEP planning should include only sources that do not contribute to global warming.

#95

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Q1: First Name (optional)	Candace
Q2: Last Name (optional)	Perry
Q3: Company or Organization - if applicable (optional)	*Respondent skipped this question*

Q8: Which emission source(s) does your comment address	Other (please specify) Green energy credits

Q9: Please type your comment below.

Energy produced by nuclear power plants should in NO way be credited as "green energy."

#96

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Q1: First Name (optional)	Alexandra
Q2: Last Name (optional)	Grabbe
Q3: Company or Organization - if applicable (optional)	*Respondent skipped this question*
Q8: Which emission source(s) does your comment address	Other (please specify) Nuclear power

Q9: Please type your comment below.

Please be sure to exclude nuclear power from clean energy sources. The use of nuclear power brings with it a real risk of radiation exposure, especially in older plants built on the same model as the one in Fukushima, Japan. This is totally different from solar or wind. Thank you.

#97

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Q1: First Name (optional)	Lee
Q2: Last Name (optional)	Roscoe
Q3: Company or Organization - if applicable (optional)	*Respondent skipped this question*

Q8: Which emission source(s) does your comment address	Other (please specify) Nuclear Energy should not be included as Green fuel

Q9: Please type your comment below.

Nuclear energy should not be included in the green and clean category. Reactors produce poisons that contaminate the environment for centuries, are carcinogenic to humans, especially the young, and are a target for terrorists. In addition the process of mining, refining, transporting, storing nuclear fuels and their waste leaves tons of greenhouse gases.

#98

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Q1: First Name (optional)	Vince
Q2: Last Name (optional)	Maraventano
Q3: Company or Organization - if applicable (optional)	Massachusetts Interfaith Power & Light
Q8: Which emission source(s) does your comment address	Building Fuels & Energy Efficiency , Transportation, Land Use & Smart Growth , Other (please specify) All GHG emissions

Q9: Please type your comment below.

Massachusetts Interfaith Power & Light, Inc.
14 Collins Rd., Waban, MA 02468 • 617-244-0755 • www.MIPandL.org

November 17, 2016

Commissioner Martin Suuberg
Massachusetts Department of
Environmental Protection
One Winter St.
Boston, MA 02108

Dear Commissioner Suuberg,

Massachusetts Interfaith Power & Light's mission is to work in covenant with our 240 faith community members in more than 100 Massachusetts cities and towns to provide a faith based response to climate change.

Allow me to make a few brief points in support of the aggressive implementation of Governor Baker's Executive Order 569 Establishing an Integrated Climate Change Stragegy.

First we emphasize as the Supreme Judicial Court (SJC) noted, that achieving a 25% reduction in greenhouse gas emissions from 1990 levels by 2020 is a legal mandate and not a goal. Secondly the recognition that the international goals of the 2015 Paris accords, are inadequate makes it even more important that states like Massachusetts act boldly to provide an example of leadership for other states and subnational political entities.

Additionally, the mandate recognized by the SJC is a mandate for the entire state, not just the Department of Environmental Protection. We urge Governor Baker to order all state agencies, including the Department of Energy Resources, the Department of Transportation and the Department of Housing and Community Development to implement regulations necessary to meet or exceed the required 25% reduction.

Over the past fourteen years we have helped many houses of worship achieve reductions of carbon dioxide emissions greater than 50% and as high as 70%. We urge Massachusetts to establish the most aggressive reductions possible. Such actions will protect the health of the citizenry from air pollution and reduce the economic damage from extreme weather events and rising sea levels.

Sincerely,

Vince Maraventano, M.Div., J.D.
Executive Director
vince@MIPandL.org.

#99

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Q1: First Name (optional) john

Q2: Last Name (optional)	cumbler
Q3: Company or Organization - if applicable (optional)	*Respondent skipped this question*
Q8: Which emission source(s) does your comment address	Electricity Generation & Distribution

Q9: Please type your comment below.

There are multiple ways for the Commonwealth to move toward greater energy efficiency and cleaner renewables. The state's support of solar energy and wind energy are good examples of state aid to help move us toward cleaner renewable energy. But nuclear energy should NOT be in that mix. It is expensive and the biggest expense will be pushed on to the next generation in terms of decommissioning, It is extremely dangerous and put a huge chunk of the state at risk. Its wastes represent an environmental disaster. Its risky nature and the very poor performance of the Pilgrim nuclear plant at Plymouth represent an existential threat to the whole southeastern region of the state. If there is even a minor meltdown at Pilgrim as there was at Three Mile Island-it would destroy the economy of Cape Cod for generations into the future. Please put the resources and commitment of the Commonwealth behind truly clean, safe and renewable energy and do not classify nuclear energy as part of our emission reduction program.

#100

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Q1: First Name (optional)	Laura
Q2: Last Name (optional)	Wagner
Q3: Company or Organization - if applicable (optional)	Unitarian Universalist Mas Action Network
Q8: Which emission source(s) does your comment address	Natural Gas Distribution System Leaks

Q9: Please type your comment below.

The leaks from the natural gas distribution system have to stop. The leaking pipelines pollute the air we breathe and increase respiratory illnesses due to environmental pollution. The leaks kill trees and vegetation, further compounding their deadly effect and they are also a danger to our communities due to the risk of explosions.

Any other company that produced a product with even a fraction of the devastation that gas leaks cause would be forced to recall their product, at their own expense, and make restitution with their customers. Gas leaks, however, are largely ignored. The pipeline delivery system is aging, the product has a detrimental effect on our environment and there are far better choices that are renewable, clean and will not damage our people and the environment.

We need to invest in the infrastructure that allows us to move away from fossil fuels and towards energy solutions for the 21st century. It's time to put people and our environment first. We need all of our regulatory agencies to work together to protect the people and our environment and not allow corporate profits to dictate policy.

#101

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Q1: **First Name (optional)**	David
Q2: **Last Name (optional)**	Agnew
Q3: **Company or Organization - if applicable (optional)**	*Respondent skipped this question*
Q8: **Which emission source(s) does your comment address**	Electricity Generation & Distribution

Q9: **Please type your comment below.**

Nuclear energy should not be considered "clean energy". The Sovacool metastudy http://capedownwinders.org/wp-content/uploads/pdf/sovacool_nuclear_ghg.pdf documents that the total life-cycle carbon emissions from nuclear's are less than from natural gas, but greater than biomass and all other renewable sources), so I understand its consideration as RELATIVELY low-carbon-emitter, however:

1. Reactor accidents cause major, long-term environmental contamination; world-wide, approximately 1% of all nuclear power generators have suffered accidents to date.
2. Nuclear emits many different highly-carcinogenic radionuclides each day that it operates, as well as many days that it doesn't operate, and there is no safe dose of radiation.
3. After 7 decades of producing nuclear 'spent' fuel, no one knows how to safely isolate it from the environment for the requisite million years (EPA). The federal government's best attempt to do so to date (the Waste Isolation Pilot Project) failed after just 15 years.
4. The massive waste heat generated by nuclear contributes to global warming.
5. Even with closed-cycle cooling, the huge water needs of nuclear have a significant impact upon the environment.
6. Possible terrorism makes nuclear a very significant risk for long-term, widespread environmental contamination.

DEP's CES seems to exclude the Pilgrim Nuclear Power Station because of the eligibility limitation to generators that commenced operation after 2010. However, it specifically includes "nuclear facilities". Even if this is a reference to "next-generation" reactors, that technology, while perhaps safer and more efficient, is unproven and it will still suffer from all of the problems listed above.

Nuclear fission is not "clean energy" and it is unlikely that it ever will be.

#102

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Q1: First Name (optional)	Donald
Q2: Last Name (optional)	Cameron
Q3: Company or Organization - if applicable (optional)	*Respondent skipped this question*
Q8: Which emission source(s) does your comment address	Electricity Generation & Distribution

Q9: Please type your comment below.

In connection with the proposed Clean Energy Standard:
Nuclear power is NOT clean energy; it should NOT be eligible for inclusion in a renewable energy portfolio standard.

#103

PAGE 1

Q1: First Name (optional)	Carolyn
Q2: Last Name (optional)	Barthel
Q3: Company or Organization - if applicable (optional)	*Respondent skipped this question*
Q8: Which emission source(s) does your comment address	Electricity Generation & Distribution , Natural Gas Distribution System Leaks

Q9: Please type your comment below.

Whenever you have gas, you will have leaks. Fix them!

And when considering new gas infrastructure--gas power plants (including the Medway Exelon power plant expansion), gas pipelines and accompanying infrastructure--please keep the following information in mind:

https://thinkprogress.org/methane-leaks-erase-climate-benefit-of-fracked-gas-countless-studies-find-8b060b2b395d#.7hhjcy1xl

#104

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Q1: **First Name (optional)**	Khristine
Q2: **Last Name (optional)**	Hopkins
Q3: **Company or Organization - if applicable (optional)**	*Respondent skipped this question*
Q8: **Which emission source(s) does your comment address**	Electricity Generation & Distribution

Q9: **Please type your comment below.**

Nuclear power should not be eligible for inclusion in a renewable energy portfolio standard!!! CLOSE PILGRIM NOW!

#105

PAGE 1

Q1: **First Name (optional)**	Norman
Q2: **Last Name (optional)**	Pierce
Q3: **Company or Organization - if applicable (optional)**	Concerned Neighbors of Pilgrim
Q8: **Which emission source(s) does your comment address**	Other (please specify) Reducing GHG Emissions under Section 3(D) of the Global Warming Solutions Act

Q9: Please type your comment below.

Currently operating nuclear reactors should not qualify in the clean energy standard when the goal is to reduce greenhouse gas emissions as required by the Mass. Global Warming Solutions Act of 2008 because:

1. To categorize nuclear generation as clean energy requires purposely ignoring the carbon foot print (and environmental destruction) of mining, manufacturing/enriching of nuclear fuel, and not counting the cost of decades, perhaps centuries, of encasing, transporting, protecting, and storing huge quantities of nuclear waste.

2. Providing any incentive such as inclusion in the CES is not likely to result in the building of additional nuclear plants in Massachusetts, because the expense of building new plants is too costly to be competitive and because the public will like resist anything "in their backyard." Incentives will probably result in nuclear plant owners profiting and not in supporting the development of reducing GHG emissions while promoting new sources of electricity.

3. Nuclear power generation is a mature industry that has failed economically and only exists because of cost shifting to rate payers and/or because the federal government will pay for the dealing with ever enlarging amounts of nuclear waste. Newly developing clean energy tenchnology needs temporary public incentives, not an old failing industry which is looking for a bailout through inclusion in the CES.

4. The Pilgrim nuclear plant continuously pumps heated water into Cape Cod Bay in vast quantities. The heat of the water is wasted energy; heated water does not contribute to cooling our planet; the heated water is affecting the ecosystem in many of the same ways the climate change does. The assumptions of the Global Warming Solutions Act could not have been that the CES poart of the act would be used as an instrument to defeat other environmental pollution concerns.

#106

PAGE 1

Q1: First Name (optional)	Diane
Q2: Last Name (optional)	Turco
Q3: Company or Organization - if applicable (optional)	Cape Downwinders
Q8: Which emission source(s) does your comment address	Other (please specify) CES/GHG-nuclear power

Q9: Please type your comment below.

Cape Downwinders is a citizen group from Cape Cod and the Islands working for the immediate closure of Entergy's Pilgrim nuclear reactor in Plymouth due to public health and safety concerns. We also support replacement of nuclear power with safe, clean, and renewable energy. We submit this public comment for the DEP Reducing GHG Emissions review. Since nuclear power is currently not in the Clean Energy and Environment Plan but is now up for consideration, we ask the DEP and Baker Administration to deny any plan to include nuclear power in the state's current and future energy portfolio.

Generation of electricity by nuclear power is neither environmentally clean nor renewable. In fact, nuclear power is dirty and dangerous energy. Unlike fossil fuel electric plants, Pilgrim does not directly pollute the atmosphere with CO2. Instead it emits radioactive particles derived from its uranium fuel that have been linked to increased cancer rates in the nearby population. It creates tons of toxic radioactive waste with nowhere to go. The Pilgrim Nuclear emits ionizing

radiation and leaks tritium instead of CO2. It also pollutes our environment and should not be considered as part of any clean, renewable energy program. Clean should mean not only exclusion of CO2 but also ionizing radiation as it too is a toxic pollutant. The National Academies of Science have determined there is no safe dose of radiation exposure.

Mining, processing, milling, enriching, and producing uranium fuel pellets is carbon intensive. The energy produced by the chain reaction from the fuel pellets to boil water is highly inefficient. One-third of the heat generated by this process results in electricity. The other two-thirds of the heat is sent directly into the environment. To discharge that waste heat, Pilgrim must daily pump about 500 million gallons of water from Cape Cod Bay. Water passes through the plant where it is heated to about thirty degrees fahrenheit higher and then discharged back into the bay. This wasted energy heating Cape Cod Bay is equal to approximately one-fifth of all the electricity used in the Commonwealth.

The waste heat contributes directly to environmental warming on a large scale, locally damaging marine life and Cape Cod Bay. Thermal pollution seriously threatens the bay's aquaculture because it kills multitudes of marine organisms and fish, some of which the State and Federal Environmental Agencies spend taxpayer funds to protect. Other violators receive fines but EPA deems Pilgrim's destruction of protected marine species as acceptable collateral damage. Additionally, when the water temperature of the bay occasionally gets too warm, Pilgrim Nuclear must shut down since the water is too warm to cool the reactor core.

High level nuclear waste is the most toxic substance on the planet. There is eleven times the amount of cesium stored in the spent fuel pool in Pilgrim than was released at the Chernobyl meltdown. It will remain in Plymouth stored under controversial conditions for generations, an ongoing threat to us all.

In addition to these constant environmentally negative impacts, the risks of catastrophic environmental and public health and safety damage which no other form of electricity generation exhibits must be considered. Pilgrim is an aging and degrading nuclear reactor, now operating beyond its original 40 year design lifespan. The Nuclear Regulatory Commission assesses Pilgrim as one of the worst operating reactors in the U.S., one step from federally mandated shutdown. Its General Electric Mark I reactor is the same model that failed in Japan. The Fukushima disaster caused over 160,000 people to forever abandon their homes while leaving radioactive and uninhabitable an area of land larger than Plymouth County. In fact, A 2006 MA AGO study determined if there were a radiological accident at Pilgrim, it would result in $488 billion in damages, 24,000 latent cancers, and contamination hundreds of miles downwind. We do not need to live with this unacceptable risk.

The Synapse report, commissioned by the state, recommends that DEP eliminate nuclear from the Clean Energy Standards, stating on pages 66-67: "Disallowing nuclear generation from use in meeting an otherwise technology-neutral Massachusetts CES obligation would be a necessary condition for making the program effective, at least until there are significant nuclear retirements in New England. At the same time, disallowing nuclear generation will also prevent "windfall profits" from CES credits to owners of nuclear facilities. Unlike renewables, lowering the marginal price of nuclear generation will not, in our opinion, result in investment in new nuclear generators in the region. Instead, revenues from a larger gap between nuclear's bid price and the clearing price would be pure profit to plant owners with no investment stimulus effect."

Providing these subsidies to Pilgrim could potentially extend the life of this unsafe nuclear reactor. We have witnessed the sale of the Entergy's Fitzpatrick nuclear reactor in upstate NY. Slated for closure in 2017, Entergy recently sold it to Exelon and it will remain online. We cannot tolerate the same scenario here in Massachusetts.

According to the Synapse report: "Providing rewards for nuclear generation will not prompt the construction of new nuclear facilities in New England (due to regulatory, cost, and political hurdles), although it may serve to prolong the life of existing facilities." In short, the report commissioned by DEP itself shows that including Pilgrim nuclear in the CES is contrary to the goals sought by the Massachusetts Clean Energy and Climate Plan. Bottom line, there is nothing clean or green about the nuclear industry when neither the industry nor the DOE have figured out how to safely store the waste for an eternity (never mind pay for it). Similarly, it would be poor public policy to create a windfall for existing power generation facilities, especially for Pilgrim Nuclear.

The original dream of clean, safe, renewable energy from nuclear fission has become a nightmare of environmental pollution, radioactive disasters, ongoing threat to public health and safety, and the creation of spent fuel waste dumps at every nuclear plant site. We support the Synapse Study which concludes nuclear power is ineligible to meet Clean Energy Standards. Also, nuclear power should not qualify as clean energy just to meet GHG emission standards. Instead, we expect the DEP to follow through with the Synapse Study recommendation to continue to deny nuclear power production in the Commonwealth as any part of the state plan to meet climate change challenges. We must promote genuinely clean, green, and renewable energy sources for the health and welfare of the citizens of the Commonwealth.

For Cape Downwinders Steering Committee,
Diane Turco, Harwich, Karen Quinn, Barnstable
William Maurer, Falmouth Sarah Thacher, Dennis
Susan Carpenter, Dennis Elaine Dickinson, Harwich
Margaret Steven, Bourne Arthur Dickinson, Harwich
Maxine Wolfset, Mashpee Bonnie Byrdges, Harwich
Don Barton, Mashpee Mary Conathan, Chatham
Arlene Williamson, Mashpee

Arlene Williamson, Mashpee

If additional support documents are required, please contact us at capedownwindersinfo@gmail.com or go to www.capedownwinders.info

#107

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Q1: **First Name (optional)**	Susan
Q2: **Last Name (optional)**	Donaldson
Q3: **Company or Organization - if applicable (optional)**	*Respondent skipped this question*
Q8: **Which emission source(s) does your comment address**	Building Fuels & Energy Efficiency , Electricity Generation & Distribution

Q9: **Please type your comment below.**

Please support a clean energy standard to drive the adoption of clean energy, to start transforming the electric grid, and to enable compliance with the GWSA. The CES should NOT undercut or come at the detriment of existing programs (like the RPS).

Mass DEP should also consider including other measures as qualifying under the CES. For example…
- energy efficiency!! This is the least expensive new "energy source."
- emerging renewable technology including storage

Especially given the incoming Trump administration, Massachusetts must take the lead and show that the US is not throwing in the towel on climate change. The Baker Administration distinguish itself from an incoming Trump administrationin many ways, but this could be the most important.

#108

PAGE 1

Q1: **First Name (optional)**	Judith

Q2: Last Name (optional)	Eddy
Q3: Company or Organization - if applicable (optional)	*Respondent skipped this question*
Q8: Which emission source(s) does your comment address	Building Fuels & Energy Efficiency , Electricity Generation & Distribution , Natural Gas Distribution System Leaks , Transportation, Land Use & Smart Growth

Q9: Please type your comment below.

To Mass DEP

I strongly believe that we need to strictly enforce the goals of the GWSA and even speed up the process, if possible, to meet the goals sooner. Climate change is the biggest challenge of our times, and we must do all we can to address it.

I support a clean energy standard as a way to foster new, incremental clean energy. I support a full transformation of our electric grid to not only move us away from fossil fuels for heating and electricity production, but to enable compliance with the GWSA. '

The CES should NOT undercut or come at the detriment of existing programs (like the RPS).

The CES SHOULD:
- extend to municipal utilities
- be restricted to new generation (DEP should consider establishing a post-2000 commencement date for eligible technology)
- be in place through 2050

I ask that Mass DEP include other measures as qualifying under the CES such as energy efficiency above what's required and emerging renewable technology including storage. Energy efficiency remains our best and most effective choice in addressing energy needs in the Commonwealth!

The CES should EXCLUDE non-RPS hydro and nuclear generation. These are not clean and/or sustainable sources of energy.

I urge you to lead on this, and to set the standard for our nation. Massachusetts must embrace innovation and take bold action to meet its climate obligation. I BEG you to separate and distinguish The Commonwealth from an incoming Trump administration that seeks to undo the progress made to date on climate mitigation. We don't have time for such nonsense.

#109

PAGE 1

Q1: First Name (optional)	Thomas

Q2: Last Name (optional)	O'Rourke
Q3: Company or Organization - if applicable (optional)	Citizen
Q8: Which emission source(s) does your comment address	Transportation, Land Use & Smart Growth

Q9: Please type your comment below.

As a citizen of the Commonwealth, I recognize that the Transportation sector comprises the largest contributor to the Massachusetts' Green House Gas Inventory, and the most complicated to achieve meaningful reductions. Accordingly, I suggest that revisions be made to 310 CMR 60.05 and include expansion and implementation of alternative/low carbon fuel use and their associated infrastructure. In addition, I feel that a cost benefit review of past, current and proposed projects be conducted to fully evaluate their carbon reduction effectiveness and be used towards development of a statewide comprehensive carbon reduction strategy in this critical sector.

#110

PAGE 1

Q1: First Name (optional)	*Respondent skipped this question*
Q2: Last Name (optional)	*Respondent skipped this question*
Q3: Company or Organization - if applicable (optional)	*Respondent skipped this question*
Q8: Which emission source(s) does your comment address	Electricity Generation & Distribution

Q9: Please type your comment below.

Applicability question: 310 CMR 7.77 Reducing Greenhouse Gas (GHG) Emissions From Electricity Generating Facilities Program:

The threshold for applicability is a facility that is subject to EPA's GHG Reporting Program as an electricity generating facility (40 CFR 98 Subpart D.) If a facility currently listed in 310 CMR 7.77(4)(b) Table A, was subject to EPA GHG reporting but has since become eligible to exit the program per 40 CFR 98.2(i) and, has indeed exited the program starting in calendar year 2016, is that facility no longer subject to 310 CMR 7.77 and, will that facility be removed from Table A?

Comment: DEP solicited feedback regarding the process for determining facility specific caps.

For existing facilities, the discussion draft set's a facility specific cap equal to an average of the reported emissions across 3 calendar years, 2013, 2014 & 2015. Certain Subpart D emission units can operate with great variability from year to year based on operational needs such as an emergency caused by an act of God. If a Subpart D unit/facility were to have an anomalously high usage year and emitted say, up to 5 times the cap, what would that mean in terms of compliance if the facility is unable to obtain enough over compliance credits.

#111

PAGE 1

Q1: First Name (optional)	Claire
Q2: Last Name (optional)	Miller
Q3: Company or Organization - if applicable (optional)	Toxics Action Center
Q8: Which emission source(s) does your comment address	Electricity Generation & Distribution

Q9: Please type your comment below.

The CES SHOULD:

- extend to municipal utilities

- be restricted to new generation (DEP should consider establishing a post-2000 commencement date for eligible technology)

- be in place through 2050

Mass DEP should also consider including other measures as qualifying under the CES. For example…

- energy efficiency above what's required in 3yp

- emerging renewable technology including storage

The CES should EXCLUDE:

- non-RPS hydro

- nuclear generation

We/I recognize that for any new standard, the devil is in the details in terms of how some of these measures are incorporated into the program, but it is not impossible to do. Massachusetts must embrace innovation and take bold action to meet its climate obligation. The Baker Administration must take lead on clean energy and distinguish itself from an incoming Trump administration that seeks to undo the progress made to date on climate mitigation.